

B.C. Reg. 289/72

O.C. 4190/72

Public Health Act
SWIMMING POOL, SPRAY POOL AND
WADING POOL REGULATIONS

[includes amendments up to B.C. Reg. 4/2010, January 14, 2010]

Contents

1 Title

Part 1 — Interpretation

2 Definitions

Part 2 — Application and Approval

3 Application of regulation

4 Certificate of authorization

5 Conformity with local bylaws

6 Operating permit required

7 Letter of certification

8 Medical health officer may allow permit

9 Medical health officer may order changes

10 Ban on fill and draw pools

11 Requirements for flow through pools

Part 3

Part 4 — Pool Construction

13 Plans and specifications

14 Inspection during construction

15 Plans and data to be submitted to medical health officer

16 Construction in accordance with plans

17 Walkway or apron around pool

18 Security fence

19 Depth marks

20 Slope of pool floor

21 Requirements for diving

22 General requirements

23 Commercial pool facilities

24 Showers and toilets

25 Artificial lighting

26 Pool basin structure

27 Pool basin finish and surface

28 Hydrostatic relief valve requirement

29 Drop offs and projections

Part 5 — Recirculation and Plumbing Requirements

30 Pool water supply

31 Water recirculation

31.1 Maximum turnover period

32 Pumps

33 Piping

34 Pool inlets

35 Gutters

35.1 Skimmers

36 Gutter drains

37 Pool main drain piping

38 Pool drain

39 Drain connection to circulation system

40 Surge tank

41 Overflow gutters

42 Surface skimming devices

43 Measurement of waste water

44 Rate of flow indicator

- 45 Disinfection equipment

- 46 Chlorine gas as disinfectant

- 47 Other means of disinfectant

- 48 Repealed

- 49 Filter piping

- 50 Filter room

- 51 Filter units

- 52 Flow through pools

- 53 Plumbing fixtures

- 54 Temperature of shower water

- 55 Soap

Part 6 — Miscellaneous Equipment

56 Diving board headroom

57 Access to diving boards and platforms

58 Guardrails

59 Wall fittings and lifelines

60 Slides and play equipment

61 Underwater ledges

62 Steps and ladders

63 Ladder construction

64 Steps and stairs

65 Lockers and basket shelves

66 Test kits

67 Vacuum cleaning system

68 Ground fault circuit interrupters

69 Lifeguard stands

70 Foot baths

Part 7 — Operation and Inspection

71 Posting of operating permit

72 Repealed

73 Requirements for operation

74 Restriction of use of diving boards and platforms

75 Residual disinfectant

76 Water sampling

77 Corrective action

78 Repeat sampling

79 Records

80 Maximum number of bathers

81 Operator certificate of competency

Part 8 — Equipment, Chemicals and Procedures

82 Evaluation of equipment, chemicals or features

83 Construction and maintenance standards

Part 9 — Therapeutic Pools

84 Provisions applicable to therapeutic pools

85 Recirculation rate

86 Supervision of bathers

87 Seats and benches

88 Pool walls

89 Water velocity

90 Toilets and showers

91 Walkways

92 Safety notices

93 Clock

Part 10 — Portable Instruction Pools

94 Provisions applicable to portable instruction pools

95 Design and use

96 Medical health officer may grant temporary exemptions

97 Standards of design and installation

Part 11 — Wading and Spray Pools

98 Requirements for wading and spray pools

99 Pool filling

100 Water quality

101 Inlet fittings

102 No cross connections

103 Toilet and drinking facilities

104 Floor finish

Part 12 and 13

Appendix A

Appendix B

Appendix C

Title

1 These regulations may be cited as the "Swimming Pool, Spray Pool and Wading Pool Regulations".

Part 1 – Interpretation

Definitions

2 In these regulations, unless the context otherwise requires,

"commercial pool" means a swimming pool having a surface area of 1 800 square feet or less which is owned or operated by, or in conjunction with, an educational, recreational or business enterprise and the use of which is restricted to members, tenants or patrons of the enterprise or their guests;

"design flow rate" means the rate at which water must flow in order to pass the entire volume of the pool within a specified turnover period;

"fill and draw pool" means a pool in which the cleanliness of the water is maintained primarily by the removal and replacement of water at periodic intervals;

"flow through pool" means a pool in which the water cleanliness is maintained by introducing a continuous flow of fresh, clean water to the pool and wasting the outflowing water;

"health establishment" means an educational, recreational, business enterprise or hospital which provides therapeutic pool or other pool facilities in order to cater to the health needs of its patients or patrons;

"lifeguard" means a person 16 years of age or older who, while on duty, is responsible for the conduct and safety of all persons in or near the pool, and who is the holder of one of the following valid and subsisting certificates:

(a) Royal Life Saving Society National Lifeguard Service Award;

(b) Royal Life Saving Society Bronze Cross;

(c) Young Men's Christian Association Senior Life Saving Award;

(d) Canadian Red Cross Society Leader Award;

(e) Red Cross-Royal Life Saving Society Joint Instructor Certification;

(f) a certificate deemed equivalent to any of the above by the YMCA, the Canadian Red Cross Society or the Royal Life Saving Society;

"lifesaving unit" shall include

(a) a non-conductive reaching pole at least 12 feet long, and

(b) a throwing ring with a quarter inch line securely attached having a length of not less than half the width of the pool plus 10 feet;

"manager" means the person who, while on duty, is responsible for the supervision of the operation of the pool and auxiliary facilities;

"medical health officer" means the medical health officer appointed under the *Public Health Act* for the area in which the pool is located;

"municipality" means a village, town, city or district municipality incorporated under any Act and includes a regional district, improvement district, a dyking district, sewerage district, drainage district and any special district established under any Act;

"operator" means a person who owns or leases the facilities consisting of the pool and who controls the operation of these facilities or, in the case of a society or corporation which owns or leases a pool, the officers of the society or corporation responsible to the society or corporation for the operation of these facilities;

"person" includes any corporation, partnership or party and the heirs, executors, administrators or other legal representatives of such person to whom the context can apply according to law;

"pool" means a swimming pool, wading pool or spray pool;

"portable instruction pool" or "learner pool" means a pool of water intended for swimming instruction and water safety instruction and which can be dismantled and moved from place to place;

"private residential pool" means a pool which has been installed for the use of the occupants and guests of one single family dwelling or duplex and does not include a pool which is a common facility owned by a strata corporation or other corporate body;

"public health inspector" means an inspector appointed pursuant to the *Public Health Act*;

"spray pool" means an artificially constructed depression or basin for use by children, into which potable water is sprayed but not allowed to accumulate in the bottom;

"swimming pool" means an artificially created body of water having a depth of 24 inches or more and all auxiliary structures and equipment which is available for swimming, recreative bathing or physiotherapy purposes, either free of charge or for a fee;

"therapeutic pool" means a pool of water provided for physiotherapy treatment, including a natural hot water pool, Roman bath, hydro swirl and hydrotherapy pool;

"wading pool" means an artificial pool of water intended for wading purposes, having a depth of less than 24 inches.

[am. B.C. Regs. 103/93, s. 1; 451/2003, s.1.]

Part 2 — Application and Approval

Application of regulation

3 These regulations shall apply to all pools within the Province, except private residential pools, and to all auxiliary structures and equipment required for the use or operation of these pools.

Certificate of authorization

4 No person shall construct a pool or make structural or mechanical changes to any pool without first obtaining a certificate of authorization from the medical health officer.

[am. B.C. Regs. 33/78; 423/98, s. 1; 451/2003, s. 2.]

Conformity with local bylaws

5 It is the responsibility of the applicant for a certificate of authorization for construction to submit to the medical health officer at the time of application written assurance from each municipality having jurisdiction to pass zoning, plumbing, electrical, building or fire prevention bylaws that the proposed construction conforms to its bylaws covering these matters.

[am. B.C. Regs. 423/98, s. 3; 451/2003, s. 3.]

Operating permit required

6 No person shall operate a swimming pool unless he is the holder of a subsisting operating permit issued by the medical health officer or a public health inspector.

[am. B.C. Regs. 275/92, s. (a); 103/93, s. 2.]

Letter of certification

7 A medical health officer shall not issue an operating permit for a new or newly renovated pool until he has received a letter of certification, acceptable to the medical health officer, signed by a competent professional engineer or architect registered to practise in British Columbia, signifying that the swimming pool has been constructed in accordance with the plans and specifications approved in the manner set out in section 4 herein.

[am. B.C. Regs. 423/98, s. 2; 451/2003, s. 4.]

Medical health officer may allow permit

8 Notwithstanding section 7, where minor details remain to be completed in order to comply with this regulation, pools may qualify for a permit at the discretion of the medical health officer.

Medical health officer may order changes

9 The medical health officer may order changes in the operation or structure of a pool if, in his opinion, sanitation, water quality or

public safety standards are not being satisfactorily maintained.
These changes must conform to these regulations.

Ban on fill and draw pools

10 No person shall construct or operate a fill and draw pool.

Requirements for flow through pools

11 No person shall operate a flow through pool unless the requirements of these regulations are met.

Part 3

Repealed. [B.C. Reg. 451/2003, s. 5.]

Part 4 — Pool Construction

Plans and specifications

13 All plans and specifications for swimming pools shall be prepared by a competent professional engineer or architect registered to practise in British Columbia and shall bear the lawful seal of the designer. The registered professional engineer or architect responsible for preparing the plans shall certify the completed works in accordance with section 7.

Inspection during construction

14 Notwithstanding section 7, the medical health officer may inspect the works during construction.

[am. B.C. Reg. 451/2003, s. 6.]

Plans and data to be submitted to medical health officer

15 Three copies of plans and specifications for the construction or renovation of a swimming pool shall be submitted to the medical health officer, together with a completed "Swimming Pool Data

Sheet," in the form specified in Appendix B hereto, copies of which may be obtained from the minister's ministry.

[am. B.C. Regs. 451/2003, s. 7; 4/2010, s. 3.]

Construction in accordance with plans

16 The pool shall be constructed in accordance with the plans and specifications as approved, unless approval of changes has been given in writing by the medical health officer.

[am. B.C. Reg. 451/2003, s. 7.]

Walkway or apron around pool

17 Except for the portion of a pool to which section 35.1 applies, a continuous apron or walkway shall extend completely around the pool and provide

- (a) a minimum walkway width of 4 feet beyond the gutter system,
- (b) drainage away from the pool edge in a manner that will not create muddy, hazardous or objectionable conditions with the pool enclosure,
- (c) when required, drains, covered with a grating, having an equivalent opening of at least 12 square inches,
- (d) drains spaced at not more than 25 feet so that no more than 400 square feet of apron area is tributary to any one drain, and
- (e) drainage systems designed in accordance with good engineering practice.

[am. B.C. Reg. 88/86, s. 1.]

Security fence

18 The pool shall be surrounded by a security fence sufficient in design and height to exclude animals and unauthorized persons from the enclosed area. Landscaping within the security fence must be

separated from the pool area by a barrier approved by the medical health officer.

Depth marks

19 Depth marks for swimming pools shall

- (a) indicate the depth of water,
- (b) be located above the water surface on the pool wall and on the walkway at the pool edge,
- (c) be located at maximum and minimum depth, at 1 foot depth increments between the shallow depth and the point of break inclusive, and at other intermediate points spaced at not more than 25 foot intervals measured peripherally,
- (d) be in arabic numerals of 4 inch minimum height, and
- (e) be a colour contrasting with background.

Slope of pool floor

20 The pool floor shall have a uniform slope not greater than 1 foot in 15 where the water depth is less than 5 feet. In commercial pools the pool floor shall have a uniform slope not greater than 1 foot in 12 feet where the water depth is less than 5 feet.

Requirements for diving

21 Pools of the type wherein diving is permitted shall have adequate clearances and depth of water for safe diving and shall be as indicated in Appendix C. For diving platforms over 3 m in height, the Federation Internationale de Natation Amateur (FINA) standards shall be followed for clearances and water depths.

General requirements

22 In order to maintain proper sanitation and public safety standards, every swimming pool shall have

- (a) a drinking water supply that meets the minister's ministry requirements for potable water,
- (b) change rooms divided into 2 parts separated by a tight partition, one part to be designated for men and the other for women, with entrances and exits screened with partitions to break line of sight,
- (c) the dressing rooms, toilets and showers arranged so that bathers pass from the toilet or dressing room area through the shower area and thence directly to the pool area; there shall be a minimum occasion for patrons in bare feet and those in street shoes to walk in the same area,
- (d) floors in dressing rooms, shower rooms, toilet areas, pool basins and aprons and other paved areas, including stairs, made of durable material which is impervious to moisture and retains a texture which is non-slip and causes no discomfort to bare feet with a minimum uniform slope to the drain of 1/4 inch per foot.
- (e) coved junctions between walls and floors in areas used by bathers,
- (f) walls and partitions of smooth, durable, impervious material, free from cracks or open joints,
- (g) dressing rooms and toilet spaces ventilated either by natural or mechanical means to minimize condensation,
- (h) privacy screens terminating at least 10 inches above the floor level, and
- (i) hose bibs of not less than 3/4 inch pipe size to enable thorough hosing down of all walks and floors and appurtenances used by bathers with a hose having a maximum length of 75 feet and recessed where possible or located away from traffic areas to avoid accidents.

Commercial pool facilities

23 (1) Notwithstanding anything in this regulation to the contrary, a commercial pool may be installed and operated without providing, in conjunction therewith at the pool side, dressing room, shower, washbasin, urinal or watercloset, drinking fountain, first aid kit, telephone, and without employing any lifeguard, provided that

(a) an adequate number of facilities, including waterclosets, showers or bath and washbasins, are available elsewhere and the pool is not more than 200 feet walking distance from the furthest of these facilities,

(b) a clearly visible notice or warning sign is posted at all entrances to the pool, stating "Warning—No Lifeguard on Duty" and any other direction to protect the users of the pool.

(2) Notwithstanding subsection (1), the medical health officer may exercise the power set out in section 24 in respect to any commercial pool.

(3) If a pool would be a commercial pool except that its use for swimming instruction is not restricted to members, tenants or patrons of the enterprise or their guests, the pool is a commercial pool for the purposes of this section and section 24.

[am. B.C. Reg. 256/98, s. (a).]

Showers and toilets

24 The medical health officer may require that, for each sex using a commercial pool, a shower and a toilet be installed adjacent to the pool and may order any other measure consistent with these regulations which he deems necessary for the safety and health of the users of the pool.

Artificial lighting

25 For indoor pools and pools used at night, a complete system of artificial lighting must be provided supplying at least 15 foot candles of illumination at all points 30 inches above the water surface, the deck, and in areas of the change rooms used by bathers.

Pool basin structure

26 A swimming pool basin shall be structurally sound and essentially watertight; constructed of durable, impervious material which will provide a finish free from cracks and open joints.

Pool basin finish and surface

27 A swimming pool basin shall have a

- (a) final finish which is white or light in colour,
- (b) smooth bottom surface where the water depth is more than 5 feet, and
- (c) non-slip surface which causes no discomfort to bare feet on the walls and on the bottom surfaces where the water depth is less than 5 feet.

Hydrostatic relief valve requirement

28 Pools not designed to resist hydraulic uplift shall be provided with a hydrostatic relief valve.

Drop offs and projections

29 There shall be no abrupt drop off or submerged projection in a pool other than properly marked stairs and safety ledges.

Part 5 — Recirculation and Plumbing Requirements

Pool water supply

30 The water in a swimming pool shall be separated

- (a) from any potable water supply by an approved backflow preventer to ensure that the water in the pool system does not flow back into the potable water supply,
- (b) by air gaps from the sewer or drainage system into which it drains, and
- (c) from a wading pool or therapeutic pool recirculation system.

Water recirculation

31 All swimming pools, except flow through pools, shall be designed to recirculate water continuously. The design flow rate for swimming pools and commercial pools shall be determined on the basis of a maximum turnover period of 6 hours and 12 hours respectively.

Maximum turnover period

31 . 1 Despite section 31, a pool must have a maximum turnover period of 2 hours if it

- (a) is designed for play or leisure,
- (b) is equipped to generate moving water features such as waves, rapid currents, vortices, sprays or water jets, and
- (c) has a maximum water depth of 48 inches or less.

[en. B.C. Reg. 378/93, s. 1.]

Pumps

32 Pumps shall be either self priming or located below the level of the pool. The pump shall be protected from objects that may damage it.

Piping

33 All piping shall be designed to minimize friction losses and to carry the required quantity of water at a velocity not to exceed 10 feet per second in supply pipes and 6 feet per second in return pipes. Piping

shall be of nontoxic material, resistant to corrosion, able to withstand operating pressures and installed according to the manufacturer's recommendations.

Pool inlets

34 Pool inlet fittings must be submerged at least 24 inches below the average operating level and located to produce, in so far as possible, a uniform circulation of water and maintain a uniform disinfectant concentration throughout the entire pool. Inlet fittings shall be of a type whereby the rate of flow through each can be adjusted and, when placed in the pool wall, spaced not more than 30 feet apart measured peripherally or one fitting for each 10 000 imperial gallons of pool volume, whichever is more. When pool sidewalls are more than 44 feet apart, floor inlets shall be used. If floor inlets are used, the number of inlet fittings shall be at least equal to the number of wall inlets required and arranged to carry surface water to the gutters or skimmers. If the pool water depth is less than 24 inches, the inlet fittings must be placed as near to the pool floor as possible.

[am. B.C. Reg. 378/93, s. 2.]

Gutters

35 Subject to section 42, overflow gutters shall extend along the entire perimeter of any swimming pool having a surface area of more than 1 800 square feet. Gutters may be omitted only at steps, recessed ladders, or at pool wall sections located between the gutter in the floor at the beach—like edge and the point on the pool wall where the water reaches 36 inches.

[am. B.C. Regs. 88/86, s. 2; 378/93, s. 3.]

Skimmers

35 .1 (1) Subject to section 42, if a pool is designed
(a) to imitate a beach-like edge,

(b) to have a continuous gutter flush with the pool floor extending the entire length of the waterline formed at the beach—like edge, and

(c) to have the section of pool deck adjacent to the gutter referred to in paragraph (b) confine waves of water from the pool that may travel beyond the gutter and return the water to the gutter,

gutters may be omitted where otherwise required provided that

(d) the water depth in the area where the gutters are omitted does not exceed 36 inches,

(e) skimmers are provided in lieu of gutters and the skimmers conform with subsection (2), and

(f) gratings with openings not exceeding 30 mm in width are installed over the front of each skimmer.

(2) A sufficient number of skimmers shall be provided so that the theoretical turnover period of the water in the area to which the skimmers relate is less than one hour measured by a rate of flow indicator connected to the skimming devices.

[en. B.C. Reg. 88/86, s. 3; am. B.C. Reg. 378/93, s. 4.]

Gutter drains

36 Gutter drains shall be provided at intervals of not more than 15 feet and shall be at least 2 inches in diameter.

Pool main drain piping

37 The pool main drain piping shall

(a) be separately valved from the gutters or skimmers and discharge into the recirculation pump suction, surge tank or an approved drain, and

(b) have a capacity equal to 100% of the design flow rate.

Pool drain

38 The pool drain shall

- (a) be at the deepest point in the pool to permit the pool to be completely and easily emptied,
- (b) have openings covered by a grating which is not readily removable by bathers, and
- (c) have openings in the gratings so that the maximum velocity of the water passing the grate will not exceed 1 1/2 feet per second at design flow rate.

Drain connection to circulation system

39 All overflow gutters and main drains shall be connected to a circulation system through a properly designed surge tank or equivalent pipe or channel.

Surge tank

40 A surge tank, pipe or channel shall be installed and have a working capacity of at least one cubic foot per bather, based on the maximum bathing load.

Overflow gutters

41 Overflow gutters shall be designed

- (a) to rapidly remove surface water at a rate equal to or greater than the design flow rate and to avoid the gutters becoming flooded,
- (b) so that the opening into the gutter beneath the coping or deck is not less than 4 inches and the interior of the gutter is not less than 3 inches wide and 3 inches deep,
- (c) to prevent entrance or entrapment of bathers' arms or legs and designed with easy access for cleaning, and

(d) to serve as a handhold so that their edges or lips are rounded and not thicker than 2 1/2 inches for the top 2 inches.

Surface skimming devices

42 (1) Surface skimming devices may be used in place of the requirements of sections 35, 36 and 39 to remove surface water from a pool if the pool

(a) has a surface area of 1 800 square feet or less, or

(b) is described by section 31.1.

(2) If subsection (1) applies to a pool, the number of surface skimming devices the pool must have is the greater of

(a) the number of these devices calculated at the rate of one device for each 450 square feet of pool surface area or portion thereof, and

(b) the number of these devices calculated at the rate of one device for each 25 to 40 imperial gallons a minute of design flow rate.

(3) Each surface skimming device must have a valve or other means to regulate the flow of water through it and must be positioned to remove surface water from the pool.

[en. B.C. Reg. 378/93, s. 5; am. B.C. Reg. 286/2002, s. (a).]

Measurement of waste water

43 In those pools designed to waste the overflow water to sewer, or otherwise, not less than 10% of the design flow rate shall pass through the overflow devices or channels, and a water meter shall be provided to measure the amount of waste water.

Rate of flow indicator

44 A rate of flow indicator located for easy viewing and calibrated in gallons per minute shall be provided and maintained for each swimming pool to show the rate of pool water circulation. It shall provide at least 95% degree of accuracy and be capable of flows measuring from 50 to 150% of the design flow rate.

Disinfection equipment

45 Automatic disinfection equipment shall be installed in all swimming pools and shall have sufficient capacity to feed up to 3 p.p.m. of chlorine or equivalent at indoor pools and 8 p.p.m. of chlorine or equivalent at outdoor pools, based upon the design flow rate.

Chlorine gas as disinfectant

46 When chlorine gas is used as a disinfectant,

(a) the chlorinator room shall be located above ground level with an exit door opening outwardly and directly to the outdoors with a screened opening to the outdoors at ceiling level,

(b) the chlorinator room shall be provided with emergency mechanical ventilation taking suction at the floor level and discharging it directly to the outdoors in a place remote from air intake structures and occupied areas, and of sufficient capacity to produce 30 air changes per hour,

(c) all openings in the chlorinator room, such as breaks through the wall for piping, except for paragraphs (a) and (b), shall be sealed with an elastomeric caulking compound to prevent the escape of chlorine gas,

(d) canister type or self contained respiratory protective equipment for use in a chlorine contaminated atmosphere, as required by the Workers' Compensation Board regulations, shall be provided and located outside the chlorinator room and near enough for immediate use in case of an emergency,

- (e) the chlorination equipment shall be locked and the key made readily available only to staff members trained in the proper handling of chlorine,
- (f) the chlorine cylinder valve protection hood shall be kept in place, except when the cylinder is connected to the chlorinator,
- (g) the chlorine cylinders shall be securely anchored,
- (h) a valve stem wrench shall be maintained on the chlorine cylinder or cylinders in use,
- (i) a weigh scale of suitable capacity for measuring the weight of liquid chlorine and cylinder shall be provided,
- (j) the chlorine rooms shall be equipped with a viewing window,
- (k) a combination light and fan switch shall be located outside the chlorine room beside the viewing window,
- (l) suitable warning signs shall be posted in accordance with the Accident Prevention Regulations¹ of the Workers' Compensation Board, and
- (m) the chlorinator shall be designed to cease operation in conjunction with the shutdown of the recirculating pumps.

Other means of disinfectant

- 47** If means other than chlorine are used as a disinfectant, residuals of equivalent disinfecting strength shall be maintained in the pool water in accordance with section 75.

Repealed

- 48** Repealed. [B.C. Reg. 271/83.]

Filter piping

49 The filter piping arrangement shall be as simple as possible to accomplish the filtration and backwashing or cleaning. Sand filter units designed for performance at high rates of filtration, i.e., 4 to 12.5 imperial gallons per minute per square foot of filter area, are acceptable for pools, provided that such filter units meet the requirements of Part 8.

Filter room

50 The size of the filter room shall provide sufficient space to allow 6 inches of clearance between filter units and 18 inches of clearance from walls, partitions and ceilings. In addition, other clearances shall be provided as prescribed by the manufacturer for dismantling the tank and removing components or contents and for working space adequate to perform routine operations. Space shall also be provided for storage of chemicals and auxiliary equipment. In rooms with fixed ceilings, the minimum room height shall be 7 feet.

Filter units

51 The filter units shall be capable of operating at continuous design flow rate and equipped with such pressure, vacuum or compound gauges as are required to indicate the condition of the filter. In vacuum type filter installations where the circulating pump is 2 horsepower or more, an adequate automatic high vacuum shut off shall be provided to prevent damage to the pump by cavitation.

Flow through pools

52 Flow through pools shall have water added continuously at the design flow rate. The quality of water added must be approved by the medical health officer and maintained to meet requirements of these regulations.

Plumbing fixtures

53 (1) For swimming pools with a maximum bathing load of 480, as described in section 80, plumbing fixtures shall be provided in accordance with the following table:

Required Number of Fixtures	Showers, Male and Female	Waterclosets		Urinals, Male	Lavatories, Male and Female
		Male	Female		
1	1 - 40	1 - 60	1 - 40	1 - 60	1 - 100
2	41 - 80	61 - 120	41 - 80	61 - 120	101 - 200
3	81 - 120	121 - 180	81 - 120	121 - 180	201 - 300
4	121 - 160	181 - 240	121 - 160	181 - 240	301 - 400
5	161 - 200	241 - 300	161 - 200	241 - 300	401 - 500
6 ¹	201 - 240	301 - 360	201 - 240	301 - 360	501 - 600

¹ For pools having a total bathing load in excess of 480, additional facilities must be provided on the basis of one shower, one watercloset and one lavatory for each 200 females or portion thereof, and one shower, one watercloset, one urinal and one lavatory for each 200 males or portion thereof.

NOTE-For determining the number of fixtures for each sex, the total number of bathers may be considered as divided between male and female on the ratio of 1.0 to 1.0 up to 1.5 to 1.0, or as determined from experience or proposed pool use.

(2) One drinking fountain for each 500 bathers or portion thereof, to be located in the pool area.

Temperature of shower water

54 Thermostatic tempering or mixing valves shall, if necessary, be installed to prevent scalding of bathers. In the event that manual valves are used, each shall be suitably marked to differentiate between the hot and cold supply. Regardless of the controls used, the water temperature at the shower head shall be between 90 and 110° F.

Soap

55 Liquid or powdered soap in suitable dispensers shall be provided at each shower head and each lavatory.

Part 6 — Miscellaneous Equipment

Diving board headroom

56 Not less than 16 feet free and unobstructed headroom shall be provided above diving boards, which shall extend a clear distance of 16 feet ahead, 8 feet to each side and 8 feet behind the free end of the board.

Access to diving boards and platforms

57 Diving boards and platforms more than 10 feet above the water level shall have the access designed so that it may be controlled.

Guardrails

58 Diving boards and platforms greater than 4 feet above the water level shall provide double guardrails for the portion of the board or platform which is not above the water area.

Wall fittings and lifelines

59 Wall fittings and any other necessary fittings shall be installed so that a lifeline can be placed at the 5 foot depth to designate the boundary between the swimming area and the diving area of the pool. Alternatively, a 4 inch wide marking strip of contrasting colour shall

be placed down the sides and across the floor of the pool at the 5 foot depth to designate the boundary between the 2 areas.

Slides and play equipment

60 No slide or other piece of play equipment shall be installed or constructed in any swimming pool without the medical health officer's approval of the design and location of the equipment.

[am. B.C. Reg. 451/2003, s. 8.]

Underwater ledges

61 A ledge may be provided on vertical walls at the deep end of a swimming pool. It shall be a maximum of 6 inches wide and at least 48 inches below the water surface. The nose of the ledge shall be rounded and marked in a contrasting colour.

Steps and ladders

62 Steps or ladders shall

(a) be provided at the shallow end of the pool if the vertical distance from the bottom of the pool to the deck or walkway exceeds 2 feet,

(b) be provided at the deep portion of the swimming pool, and, if the pool is over 30 feet wide at the deep end, such steps or ladders shall be installed on each side,

(c) be installed so as not to interfere with competitive events, and

(d) have at least 4 rungs when placed in water depths greater than 5 feet.

Ladder construction

63 Swimming pool ladders shall be corrosion resistant and shall be equipped with nonslip treads at least 3 inches wide and 13 inches long.

Steps and stairs

64 Steps or stairs leading into a pool shall

- (a) be of nonslip design in accordance with section 22 (d),
- (b) have a minimum tread depth of 12 inches and a maximum rise or height of 10 inches,
- (c) have the nose marked in a contrasting colour, and
- (d) be provided with suitable handrails to allow safe use of the steps or stairs.

Lockers and basket shelves

65 Lockers and basket shelves, if supplied for use at pools for storage of bathers' clothing, shall be well ventilated, raised at least 4 inches off the floor and readily cleanable.

Test kits

66 Every pool shall be provided with a suitable test kit for the reliable determination of disinfectant residuals and the hydrogen-ion concentration.

Vacuum cleaning system

67 An efficient vacuum cleaning system shall be provided capable of cleaning the entire swimming pool floor. When the vacuum cleaning system is an integral part of the recirculation system, connections shall be located in the walls of the swimming pool at least 8 inches below the water level.

Ground fault circuit interrupters

68 Ground fault circuit interrupters shall be installed in all swimming pools in accordance with the Provincial Electrical Code. Existing pools shall comply with this section by June 1, 1973, or discontinue the use of underwater lighting by physically severing the circuits.

Lifeguard stands

69 Elevated lifeguard stands and lifesaving units shall be provided at all swimming pools on the basis of the following table:

Number of Lifeguard Stands and Lifesaving Units	Pool Area (Square Feet)
0	less than 1 800
1 of each	1 800 — 3 500
2 of each	3 500 — 5 000
1 of each for every 150 feet of pool perimeter	more than 5 000

Foot baths

70 If foot baths are provided, they shall be equipped with adequate water supply and drain designed for continuous flow through operation.

Part 7 — Operation and Inspection

Posting of operating permit

71 The operator shall ensure that the operating permit is posted in a conspicuous place in the swimming pool area during such time as the operating permit is valid and subsisting with respect to the pool.

Repealed

72 Repealed. [B.C. Reg. 49/2009, s. 2 (f).]

Requirements for operation

73 Every swimming pool manager shall ensure that

(a) a minimum of 2 staff members are on duty at all swimming pools when the pool is open to the public, to include one lifeguard and another person conversant with the emergency plan for the pool,

(b) the pool is under the close supervision of either a lifeguard when the pool is open for general use or a swimming instructor when the pool is used only for instruction, or both lifeguard and instructor when the pool is used simultaneously for general use and instruction,

(c) at least one lifeguard is on duty at pool side for each 100 persons or portion thereof within the pool area,

(d) there is at least one lifeguard, 17 years or older, on duty at pool side,

(e) effective measures are taken to see that dogs and other animals are not permitted to enter the pool area,

(f) no bather is permitted to enter the pool water until he has taken a cleansing shower, using warm water and soap,

(g) no person enters the pool who

(i) is obviously ill,

(ii) has an open wound or sore,

(iii) is wearing a bandage,

(iv) has sore or infected eyes, or

(v) has discharging ears or nose,

(h) all bathing suits and towels supplied to bathers are laundered after each use, and that the method of cleaning, storing and handling rental bathing suits and towels is that approved by the medical health officer,

(i) the pool aprons, walkways, dressing rooms, shower rooms and toilets are cleaned at least daily and kept free of all equipment and material not needed for the proper operation of the pool,

(j) a standard No. 2 Unit Kit (first aid), as recommended by the Workers' Compensation Board, is fully stocked and readily available for use at all times,

(k) lifesaving units are mounted in conspicuous places and ready for use at all times,

(l) only persons in clean bathing attire, the owner of the pool and his servants or agents and persons mentioned in Part 12 of these regulations are allowed to enter the pool area, except as otherwise provided in these regulations,

(m) officials and spectators who may be dressed in street clothes are allowed to enter the pool area only for special functions,

(n) a set of rules governing the use of the pool is posted in a prominent position and states that

(i) all persons with open sores, bandages, head colds, discharging ears or noses or infected eyes are forbidden to enter the pool area,

(ii) a cleansing shower using warm water and soap is mandatory before entering the pool area,

(iii) running, fighting or any form of conduct likely to cause an accident in the pool is forbidden,

(iv) all accidents must be reported to the pool manager at once, and

(v) no bather shall be permitted to enter a swimming pool unless under supervision of a qualified swimming instructor or lifeguard,

(o) the water in a filled pool is of such clarity that the pattern of the pool drain can be clearly seen by a person standing on the edge of the pool at the deep end,

(p) the pool water and the pool walls and bottom are kept free of visible dirt, litter, body oil and algal growth,

(q) the pool water is tested at least once every day of operation to determine the pH (hydrogen-ion concentration) and maintained at a value of not less than 7.4,

(r) the pool water is tested frequently for residual disinfectant before and during each period of swimming pool usage and maintained in accordance with section 75,

(s) the water in all pools except therapeutic pools is not artificially heated to a temperature above 98° F,

(t) a private line telephone is installed for the purpose of emergencies and a list of numbers to include the nearest available doctor, ambulance service, hospital and police or fire department rescue unit is prominently displayed adjacent to the telephone,

(u) decks and floors are maintained with a nonslip surface,

(v) the water level in the pool is maintained so that at least 50% of the design flow rate is continuously flowing to the overflow gutters or skimmers during pool use, and

(w) the lifeline or the alternate marking strip is in place at the 5 foot depth in accordance with section 59.

[am. B.C. Reg. 286/2002, s. (b).]

Restriction of use of diving boards and platforms

74 The use of diving boards and platforms shall be restricted in the interest of safety at the discretion of the swimming pool manager.

Residual disinfectant

75 A suitable residual of a disinfectant shall be maintained throughout the swimming pool water. The minimum disinfectant residual maintained, in parts per million, shall be as follows:

Disinfectant	Type of Residual	pH	
		7.4 - 7.8	Higher Than 7.8
Chlorine	Free available chlorine	0.5	1.0
Chlorine cyanurate	Free available chlorine	1.0	1.5
Bromine	Bromine	1.0	1.5

The use of any other disinfectant shall comply with Part 8 of these regulations. Water samples for residual tests shall be taken from a point near the outlet of the pool, or as directed by the medical health officer.

Water sampling

76 Water samples taken from swimming pools for bacteriological examination will be taken at a time when the pool is in use from a point near the outlet of the pool and at such additional sampling points as may be selected by the medical health officer. The Multiple Tube Fermentation Technique, using 5 to 10 millilitre portions, shall be used to measure the presence of organisms of the coliform group in accordance with "Standard Methods for the Examination of Water and Wastewater".

Corrective action

77 The medical health officer shall order immediate corrective action when the results of any single sample tested for the presence of organisms of the coliform group in accordance with section 76 show 3 or more positive portions.

Repeat sampling

78 After corrective action has been taken in accordance with section 77, a repeat sample or series of samples shall be taken and tested in accordance with section 76. If the results of any of the repeat samples show a positive portion, the medical health officer may, at his discretion, order the swimming pool closed and revoke the operating permit.

Records

79 The manager shall keep a daily record of all accidents, maximum bathing loads, attendance, amount and types of chemicals added to the water, the results of those tests done for residual disinfectant and pH, and any other records deemed necessary by the medical health officer. The records must be available for inspection by the medical health officer and reported to him as he may direct.

Maximum number of bathers

80 The maximum number of bathers permitted in the swimming pool area at one time shall not exceed a number determined by the following formula:

$$\text{maximum bathing load} = \frac{D}{27} + \frac{S}{10}$$

Where D = area of swimming pool in square feet where the water depth is more than 5 feet, and

Where S = area of swimming pool in square feet where the water depth is less than 5 feet.

Pool depths of less than 2 feet shall not be considered in the calculations.

The manager shall provide a method of determining the total number of bathers in the pool by numbering lockers, keys, tags, etc., so that the above requirement is met, or further limit the maximum bathing load in the interest of public safety and possible overcrowding.

Operator certificate of competency

81 Every swimming pool shall be operated and maintained by a competent operator and manager. The minister's ministry may require a certificate of competency obtained through attendance and successful completion of an approved swimming pool operator's training course as evidence of compliance with this section.

[am. B.C. Reg. 4/2010, s. 3.]

Part 8 — Equipment, Chemicals and Procedures

Evaluation of equipment, chemicals or features

82 The minister may initiate any programme of study to evaluate any equipment, chemicals or design features for use in the construction, operation or maintenance of pools.

Construction and maintenance standards

83 Only equipment, design features and materials approved by the Canadian Standards Association, the National Sanitation Foundation or the minister shall be used in the construction, operation or maintenance of a pool

Part 9 — Therapeutic Pools

Provisions applicable to therapeutic pools

84 (1) Parts 10 and 11 shall not apply to therapeutic pools.

(2) Provisions of Part 9 shall govern the construction, operation and maintenance of the therapeutic pool, notwithstanding any conflicting provisions elsewhere in these regulations.

Recirculation rate

85 The recirculation rate through the filter system shall be sufficient to pass the entire volume of the pool in one hour or less.

Supervision of bathers

86 If a therapeutic pool is operated as a health establishment, the manager shall be responsible for the continuous supervision of bathers. At all other establishments where a therapeutic pool is operated, the manager may be required by the medical health officer to employ a person to be responsible for the continuous supervision of bathers.

Seats and benches

87 Seats and benches shall have a nonslip surface and the edges shall be marked in a contrasting colour.

Pool walls

88 Pool walls shall have a smooth finish to facilitate cleaning.

Water velocity

89 A maximum velocity of water through the drains of any of the recirculation systems shall be 1 1/2 feet per second.

Toilets and showers

90 A minimum of one toilet and one shower shall be provided conveniently near the pool for each sex.

Walkways

91 Pools less than 100 square feet in area may have a reduced walkway width of 2 feet for up to 75% of the pool perimeter. The access to the pool shall be from a walkway 4 feet or greater in width.

Safety notices

92 A clearly visible notice or warning sign shall be posted at all entrances to the pool, stating such directions necessary for the safety of the patrons.

Clock

93 A clock of sufficient size and design shall be located to be seen by those in the pool.

Part 10 – Portable Instruction Pools

Provisions applicable to portable instruction pools

94 (1) Parts 9 and 11 shall not apply to portable instruction pools.

(2) Provisions of Part 10 shall govern the construction, operation and maintenance of a portable instruction pool, notwithstanding any conflicting provisions elsewhere in these regulations.

Design and use

95 Portable instruction pools shall be

- (a) completely portable and designed with consideration given to sanitation and safety, and
- (b) used only for water safety instruction.

Medical health officer may grant temporary exemptions

96 (1) The medical health officer, by notice in writing, may grant temporary exemptions from provisions in these regulations in the case of a portable instruction pool, provided he is satisfied that such exemptions do not create a sanitation or safety danger to users of the portable instruction pool or to members of the public.

(2) In his notice of exemption aforesaid, the medical health officer must specify the period of exemption and the model or individual portable instruction pools being exempted.

[am. B.C. Reg. 451/2003, s. 7.]

Standards of design and installation

97 Standards of design and installation for portable instruction pools may be set from time to time at the discretion of the minister and be such as to promote sanitary and safe conditions.

Part 11 — Wading and Spray Pools

Requirements for wading and spray pools

98 (1) Wading pools and spray pools shall

(a) be made of durable material which is impervious to moisture and retains a texture which is nonslip and causes no discomfort to bare feet,

(b) be completely free of obstructions which may be hazardous to children,

(c) have a floor with a maximum slope of 1 in 15 and a minimum of 1 in 50,

(d) be entirely surrounded by a walkway at least 4 feet wide which falls away from the pool or basin edge at a uniform slope of not less than 1 in 50, and

(e) have a fence or other barrier with controlled access surrounding the pool and the walkways to prevent the easy access of non-users and pets.

(2) Subsection (1) (e) does not apply to spray pools.

[am. B.C. Reg. 286/2002, s. (c).]

Pool filling

99 A wading pool shall be either filled with potable water each day it is used, drained before dark and left empty overnight or, as an alternate, the entire volume of the wading pool recirculated through an approved filter in 2 hours or less, in which case a security fence and lockable gate is to be provided.

Water quality

100 The quality of water used in a wading pool and for a spray pool must be approved by the medical health officer.

Inlet fittings

101 Inlet fittings in wading pools using recirculation systems shall be submerged and located to produce uniform distribution of clean water throughout the pool.

No cross connections

102 There shall be no cross connections between a wading pool or spray pool and any potable water supply, the water circulation system of any swimming pool or any sewer.

Toilet and drinking facilities

103 Separate toilet facilities with hand basin shall be provided near the wading pool for each sex. A drinking fountain shall be provided near the pool.

Floor finish

104 The floor of the wading pool shall be finished in a light colour.

Part 12 and 13

Repealed. [B.C. Reg. 451/2003, s. 5.]

Appendix A

Repealed. [B.C. Reg. 275/92, s. (b).]

Appendix B
Swimming Pool Data Sheet

(Indoor)

(Outdoor)

Name of pool Address
.....

City or Town
.....
.....

Owner or operator..... Designer
.....

Address Address
.....

Prof. Eng. Arch.

- 1 Pool area(sq. ft.); deck..... (sq. ft.) Water depth: Min.....(ft.), max..... (ft.)

- 2 Maximum bathing load: Shallow (S) Deep (D)..... Total

- 3 Pool volume (imp. gals.)

- 4 Turnover (hrs.) at design flow rate of (imp. g.p.m.)

- 5 Recirculating pump: Make and model Flow..... (imp. g.p.m.) at..... (ft. TDH)

6 Filters: Sand Diatomite Pressure Vacuum Gravity NSF approved: Yes No

Make and model

Surface area (each filter)..... (sq. ft.)

Surface area (each element)..... (sq. ft.)

Rate of filtration..... (imp. g.p.m./sq. ft.) Number of filters Number of elements.....

Total filter capacity Total area (all filters) (sq. ft.)

Max. velocity: return piping (from pool) Total area (all elements) (sq. ft.)

..... (f.p.s.); Rate of Backwash (imp. g.p.m./sq. ft.)

supply piping (to pool) Rate of filtration x total area... (imp. g.p.m.)
(f.p.s.)

Gauges: Pressure Vacuum Rate of flow indicator: Make and model
.....

Number range.....
to.....

7 Feeders: Chemical Slurry

Chemicals used

Make and model

.....

Make and model

Capacity

.....

Capacity

Injection point

.....

.....

Injection

point.....

8 Backwash pump: Make and model Flow..... (imp. g.p.m.) at (ft. TDH)
Backwash rate per filter (imp. g.p.m.)

9 Disinfection: Hypochlorite Chlorine gas Other
.....
Make and model Capacity or lb./24 hr.
Point of injection: Filter infl. Filter effl. max. dosing ratep.p.m.

10 Pool inlets: Type Size Total number at ft.
spacing.
Depth below W/L (in.)

11 Main drain: Make and model Number
.....
Size of free opening (sq. in.) Vel. through grate opening..... (f.s.)

12 Overflow: Gutter Rollout Deck Level
Number of drains at ft. spacing; size (in.)
Skimmers: Make and model
.....
Max. capacity..... (imp. g.p.m.) Number of skimmers..... at (sq. ft./skimmer)
Normal flow through overflows % NSF approved: Yes No

13 Makeup water: Size of makeup line (in.)
Source, public private Air-gapped: Yes No

Control: Manual Automatic

Make and model

.....

Backflow preventer: Yes No

14 Water piping: Copper Galv. Plastic Other

15 Remarks (for Health Dept. use)

The foregoing data are true statements of facts pertaining to this pool as it is to be constructed.

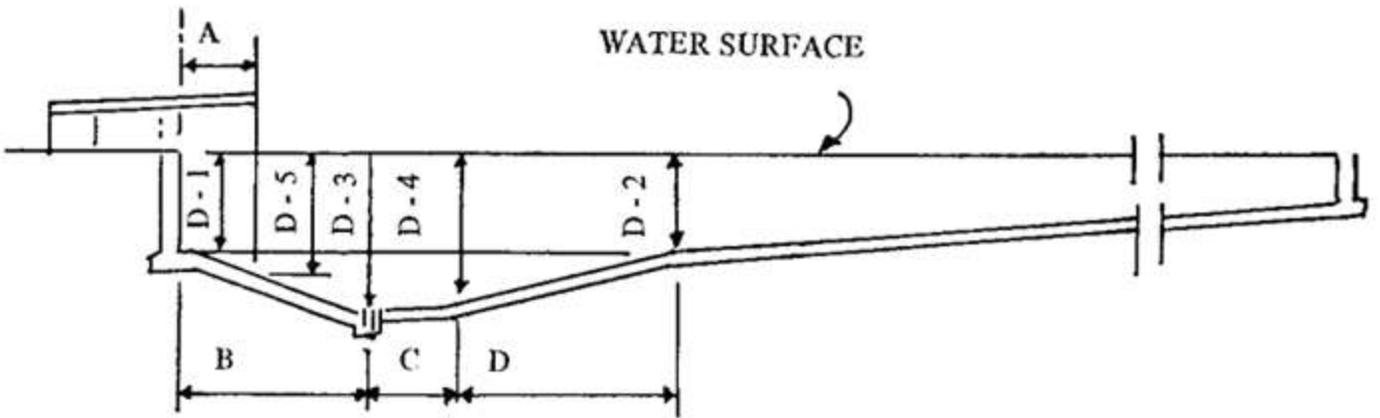
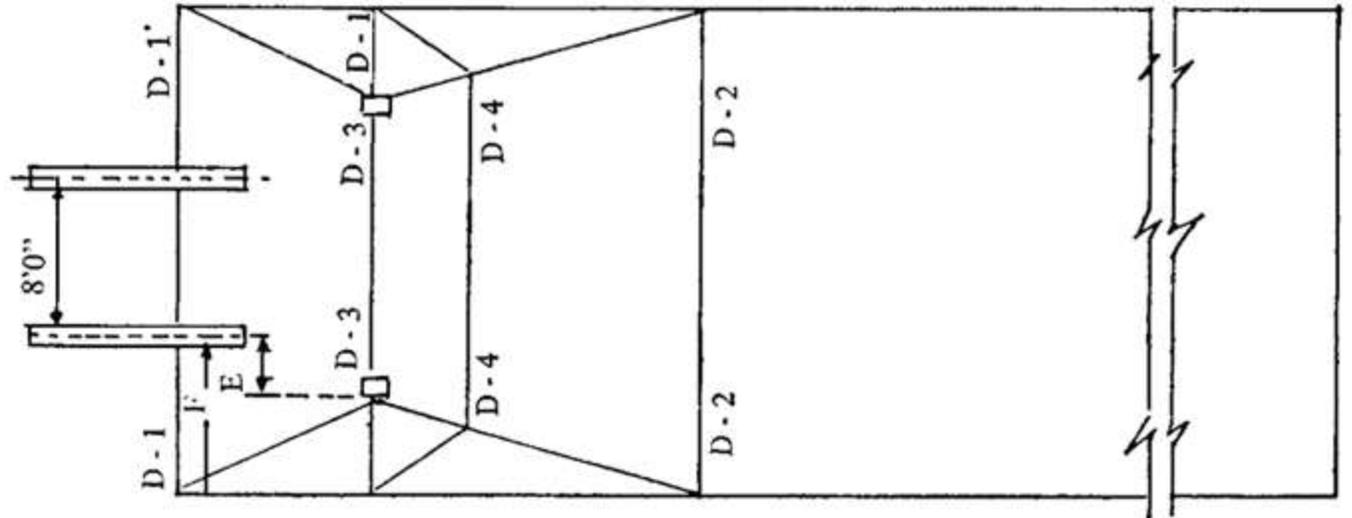
Date

(Signed)

.....

(Design Engineer or Architect)

Appendix C



D-1 shall be at end wall of diving area or not more than 6 inches from this wall.

D may vary, but slope of D shall not exceed 1 foot vertical in 2 feet horizontal.

Distance between boards shall not be less than 8 feet centre to centre. There shall be a walkway at least 3 feet wide behind diving-boards.

Stands and Boards	Depth					Length of Section					
	D-1	D-2	D-3	D-4	D-5	A	B	C	D	E	F
3 metre board	5'0"	5'0"	12'0"	11'9"	10'0"	5'0"	8'0" ¹	12'0"	15'0"	3'0"	12'0"
(minimum)	—	—	—	—	—	6'0"	10'0"	—	—	—	—

(maximum)											
1 metre board											
(minimum)	5'0"	5'0"	10'6"	10'0"	9'0"	5'0"	8'0"	12'0"	10'0"	2'0"	8'0"
(maximum)	—	—	—	—	—	6'0"	10'0"	—	—	—	—
Deck level											
(minimum)	5'0"	5'0"	9'0"	8'6"	8'0"	2'6"	6'0" ²	6'0"	12'0"	2'0"	8'0"
(maximum)	—	—	—	—	—	4'0"	10'0"	—	—	—	—
No board	—	—	—	—	—	—	—	—	—	—	—

¹ B and C may vary to attain total 20'0" minimum.

² B and C may vary to attain total 12'0" minimum.

1. see now B.C. Reg. 296/97, Occupational Health and Safety Regulation

[Provisions of the *Public Health Act*, S.B.C. 2008, c. 28, relevant to the enactment of these regulations: section 115]