



DENVER
THE MILE HIGH CITY

**City and County of Denver
Pool Rules and Regulations
Chapter 51 DRMC**

Adopted by the Board of Environmental Health on November 9, 2006

as amended March 8, 2007
and further amended April 11, 2013

Amends and supersedes the Pool Rules and Regulations adopted March 24, 1997

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Adopted as amended:


Chair, Board of Environmental Health

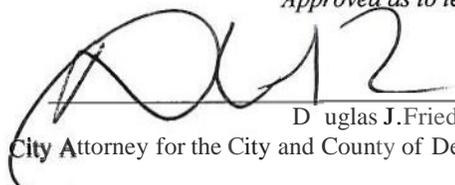
Approved and adopted:


Doug Linkhart

Manager, Department of Environmental Health

Date: 11/11, 2013

Approved as to legality:


Douglas J. Friednash
City Attorney for the City and County of Denver

Authority: The Board of Environmental Health, pursuant to and in accordance with its authority in § 2.12.4 of the Charter and in Chapter 24, Articles I and VIII, and the Manager of Environmental Health pursuant to and in accordance with his authority in Chapter 24, Article II concerning Chapter 51 Swimming Pools.

ARTICLE I.
DEFINITIONS

These words have the following meanings when used in these regulations:

1. "Board" means the Board of Environmental Health.
2. "Chemical Feeder" means any device or equipment used to add or inject chemicals into the water of a pool.
3. "Filter" means any device or equipment that is used to remove particulate matter from pool water.
4. "Filtration Rate" means the rate of flow of pool water through the filter. It is normally calculated as gallons per minute per square foot of filter media surface area.
5. "Inlet" means a feature of the pool that returns water to the pool from the filters as a part of the recirculation system.
6. "Limited Access Pool" means a pool maintained in conjunction with a hotel-motel, apartment house, condominium, health club, health facility, or similar facility, and that is not available for use by the general public, but only by their occupants or members and their guests.
7. "Main Drain" means the fitting(s) located on the bottom of the pool in the deepest part that are connected by pipe to the recirculation equipment. Main drains allow water from the bottom of the pool to be filtered and chemically treated and may also serve to drain or empty the pool.
8. "Manager" means the Manager of the Department of Environmental Health or his/her representative.
9. "Natural Area" means a designated portion of a natural or impounded body of water in which the designated portion is devoted to, recreational bathing, or wading and for which an individual is charged a fee for the use of such areas for such purposes. Appurtenances used in connection with the natural area are included.
10. "NSF" means National Sanitation Foundation.
11. "Overflow Gutter" means a feature of the pool that skims the water and removes surface film or floating debris and is normally a part of the recirculation system.
12. "Pool" means swimming pool, wading pool, spray pool, spa, hot tub, therapeutic pool, or the like.
13. "Skimmer" means a feature of the pool that may be used in place of overflow gutters as a means of skimming the water.
14. "Spa" or "Hot Tub" means a pool designed for relaxation, recreational, or therapeutic use where the user is sitting, reclining, or at rest and the pool is not drained, cleaned, or refilled for each user. The spa may include, but not be limited to hydro-jet circulation, hot water, cold water, mineral baths, or air induction bubbles or any combination.
15. "Spray Pool" means a pool or artificially constructed depression for use by bathers in which water is sprayed, but is not allowed to pond, in the bottom of the pool.
16. "Swimming Pool" means a body of water, other than a natural area, maintained exclusively for swimming or wading and includes appurtenances used in connection with the pool. It does not include private pools used solely for family purposes in single family residences such as in back yards, or natural areas.
17. "Turnover Rate" means the time necessary to circulate the entire volume of the pool water through the filtration system.
18. "Therapeutic Pool" means a pool used for physical therapy including but not limited to post-operative and pre-operative strength training, assistance of buoyancy of water, and other one-on-one training.
19. "Wading Pool" means a pool of water equal to or less than 18" deep and intended for wading purposes.

ARTICLE II.

DESIGN CRITERIA

If no immediate danger to public health and safety exists, the Manager may exempt pools built or remodeled before the effective date of these regulations. All systems, equipment, materials, devices must comply with the criteria set forth in Article II and must operate, function, or perform and be in a condition that achieves the purpose(s) stated, if any, in the rules below.

A. MATERIAL

Pools must be constructed of concrete, steel, or other approved, permanent material with an impervious finish.

1. The inside surface must be constructed of a permanently impervious material that retains a smooth finish with no cracks or open joints.
2. The bottom surface below a depth of five (5) feet must be smooth to facilitate cleaning and movement of bottom deposits to a main drain.
3. The bottom surface above a depth of five (5) feet must be as smooth as practicable while having a non-slip finish.
4. The walls and bottom of must be light-colored and clearly visible at all times.
5. The walls must be smooth and of an easily cleanable material.

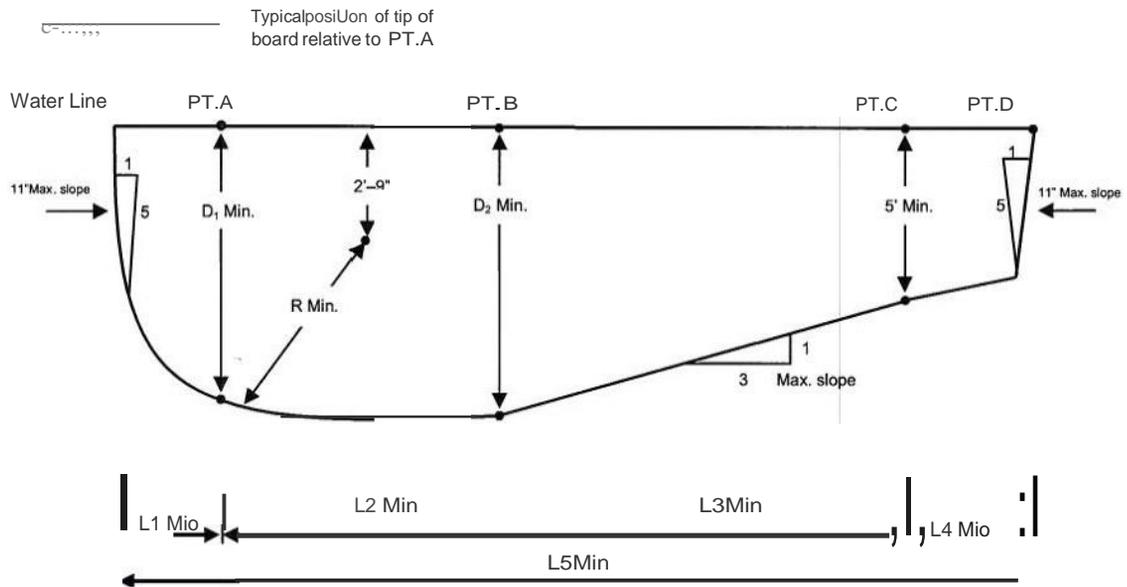
B. SHAPE, DESIGN, SLOPES

The pool must be designed and constructed in a shape or contours enabling efficient and safe control of the pool and bathers and not impeding the recirculation of water in the pool.

1. The slope of the bottom of any portion of the pool having a water depth of less than five (5) feet must be uniform and must not be more than (1) foot in twelve (12) feet. In portions at the break where the shallow end goes into the deep end of the pool, the slope must not exceed one (1) foot in three (3) feet.
2. Walls of a pool must comply with the following specifications.
 - a. Areas of the pool not used for diving must have vertical walls and have a six (6) inch radius to the floor.
 - b. The dimensions of the diving area of the pool must conform to the following table:

		Minimum Dimensions								Minimum width of Pool at		
Maximum diving board length	Maximum board height over water	D1	D2	R1	L1	L2	L3	IA	L5	PT.A	PT.B	PT.C
10'	26"	7'0"	8'6"	5'6"	2'6"	8'0"	10'6"	7'0"	28'0"	16'0"	18'0"	18'0"
12'	30"	7'6"	9'0"	6'0"	3'0"	9'0"	12'0"	4'0"	28'0"	18'0"	20'0"	20'0"
16'1"	1 meter	8'6"	10'0"	7'0"	4'0"	10'0"	15'0"	2'0"	31'0"	20'0"	22'0"	22'0"
16'3"	3 meters	11'0"	12'0"	8'6"	6'0"	10'6"	21'0"	0"	37'6"	22'0"	24'0"	24'0"

L2, L3, L4 combined represent the minimum distance from the tip of board to pool wall opposite diving equipment.



L4 is a minimum dimension to allow sufficient length opposite the board. This may of course be lengthened to form the shallow portion of the pool.

3. Safety ledges when provided on vertical walls in the deep portion of the pool must not be over four (4) inches wide, at least four (4) feet below the water surface, and must slope one-half (1/2) inch in four (4) inches toward the pool.
4. At least fifteen (15) feet free and unobstructed head room must be provided above diving boards.
5. Horizontal separation often (10) feet must be provided between diving boards, except this may be reduced to eight (8) feet for surface boards less than one-half (1/2) meter in height.
6. Areas of the pool greater than three and one half (3 1/2) feet deep must be separated from the rest of the pool by a buoy line or safety rope.
7. In the areas of the pool utilized for competitive swimming, the following minimum water depth must be met:
 - a. Four (4) feet where starting platforms of higher than eighteen (18) inches are used.
 - b. Three and one half (3 1/2) feet where starting platforms of eighteen (18) inches or lower are used.
 - c. Three and one half (3 1/2) feet in competitive swimming lanes used for turning.

C.DECK AREAS

1. The general rule is that the deck areas of all pools must have a minimum of four (4) feet of unobstructed deck area measured from the water's edge; provided, however, that if certain design elements determined to be protective of public health and safety are fully incorporated in a satisfactory manner, the Manager may approve alternative design proposals as set forth in subsection C.I.a. below. If the Manager does not approve the alternative design, the licensee (including his/her designated representative) may petition the Board of Environmental Health for review and approval.
 - a. **Design Elements:** As the Manager, or the Board, determines is necessary, the design elements listed below must be incorporated into any alternative design (and constructed into the facility) in a manner

that protects public health and safety. Additional design elements may be required based on the particular alternative design proposed as is necessary to protect public health and safety.

- Additional steps, ladders, and railings.
 - Limits on length, height, depth and width of pool
 - Additional or alternative signage requirements, including wording and size of lettering.
 - Grating over gutter systems and non slip surfaces.
- b. **Procedure.** If the Manager does not approve an alternative design proposal, the applicant shall submit a request for further review by the Board to the Manager. A representative of the Department will present the proposed design and the reasons the Manager finds that the alternative design does not satisfactorily protect public health and safety to the Board. If the Board determines that a particular alternative design proposal satisfactorily protects public health and safety, it may approve the alternative design proposed.
 - c. **Reservations of Rights.** The Board may require any owner of a facility with an approved alternative design under this rule to incorporate additional or alternative design elements if the Board determines that the approved design elements do not fully protect public health and safety or are not fully complied with or both.
2. The deck area must be impervious, easily cleanable, free of trip hazards, and entirely surround the pool.
 3. A curb must be provided on the outside of the deck area where deemed necessary to prevent spectators' litter from being kicked onto the pool deck and to prevent surface water from flowing onto the pool deck. If a curb or coping is provided around the entire perimeter of the pool, then such raised edge must be a nonslip material, have rounded edges, and be at least one (1) foot wide and not less than two (2) inches nor more than six (6) inches in height.
 4. The deck area must have a slope of not less than one-fourth (1/4) inch per foot and not more than 1/2" per foot directed away from the pool edge.
 5. The deck area must have a smooth, non-slip finish.
 6. When deck drains are provided, they should be so located that the deck drain will service not more than four hundred (400) square feet of the deck area. Deck drains must be so located that they are not more than fifteen (15) feet on centers. Water must not be allowed to puddle on the deck.
 7. The deck area drains must not be connected to the recirculation piping system.
 8. The deck at the edge of the pool may serve as the handhold provided that at least four (4) inches of the deck edge along the pool is sloped fifteen to twenty degrees (15 - 20) upward toward the pool. This edge must be rounded so as to provide a comfortable and secure surface for grasping with the palm and extended fingers of a person in the pool. Typical bull-nosed coping is acceptable as a handhold. The handholds must be no more than nine (9) inches above the normal water line.

D.OVERFLOW GUTTERS

Pools that are provided with overflow gutters must have the necessary slope to prevent the accumulation of dirt or other material, ample size to carry off normal amounts of water introduced into them, and easy access for cleaning. The water level of the pool must be maintained at the rim of the overflow gutter.

1. Overflow gutters must extend around the entire perimeter of the pool, except at steps or recessed ladders.
2. The overflow gutter must be level within two-tenths (.2) of an inch on pools smaller than forty by eighty-five (40 x 85) feet and three-tenths (.3) of an inch on larger installations.
3. The overflow gutter must be capable of continuously removing 100% of the water required by the recirculation rate of the pool.
4. All overflow gutters must be connected to the recirculation system through a properly designed surge tank. The gutter, drains, and return piping to the surge tank must be designed to rapidly remove overflow water caused by recirculation displacement, wave action, or other causes.

5. The opening into the gutter beneath the coping must not be less than four (4) inches and the interior of the gutter must not be less than three (3) inches wide with a depth of at least three (3) inches. Where large gutters are used, they must be designed to prevent entrance or entrapment of bathers' arms or legs.
6. The overflow edge or lip must be rounded and not thicker than two and one-half (2 1/2) inches for the top two (2) inches. The overflow edge, or lip, must also serve as a handhold.
7. The overflow outlets must have outlet pipes that are at least one and one-half (1 1/2) inches in diameter and drain a maximum of fifteen (15) lineal feet of gutter.
8. Overflow outlet fittings must have a clear opening in the grating of at least equal to one and one-half (1 1/2) times the cross-sectional area of the outlet pipe.

E. SKIMMERS

Skimmers must be provided when overflow gutters are not used.

1. Skimmers are permitted on pools providing approved handholds are installed and sufficient motion to the pool water is induced by the pressure return inlets. At least one skimming device must be provided for each four hundred (400) square feet of water surface area or fraction thereof, with a minimum of two (2) skimmers. Skimmers must be located as to minimize interference with each other and to insure proper skimming of the entire pool surface. Skimming devices must be built into the pool wall, develop sufficient velocity on the pool water surface to induce floating oils and wastes into the skimmer from the water surface of the entire pool area, and meet the following general specifications:
 - a. Capable of continuously removing 100 percent of the designed turnover rate.
 - b. Have an automatically adjustable weir that operates freely with continuous action to variations in water level over a range of at least four (4) inches. The weir must be sufficiently buoyant and designed to develop effective velocity.
 - c. Have an easily removable and cleanable basket or screen through which all overflow water passes and that traps large solids.
 - d. Have a device to prevent air-lock in the section line. The equalizer pipe must provide an adequate amount of water for pump suction should the water of the pool drop below the weir level, provided that, if any other device, surge tank, or arrangement is used, a sufficient amount of water for pump suction is assured.
 - e. Where the equalizer pipe is used, it must be sized to meet the capacity requirements of the filter pump and must not be less than one and one-half (1 1/2) inches in diameter. This pipe must be located at least one (1) foot below the lowest overflow level of the skimmer. It must be provided with a valve or equivalent device that will remain tightly closed under normal operating conditions, but will automatically open when the water level drops as much as two (2) inches below the lowest weir level.
 - f. The skimmer must be constructed of sturdy, corrosion-resistant materials.

F. INLETS

Inlets must be submerged and located to produce uniform circulation of water throughout the pool without the existence of dead spots and to carry away pool bottom deposits to the outlets.

1. Inlets must be placed at a minimum of fifteen (15) foot intervals around the entire perimeter. In any case, an adequate number of inlets must be provided, properly spaced and located to accomplish complete and uniform recirculation of water and maintenance of uniform disinfectant residual at all times.
2. All inlets must be designed to have adjustable orifices or must be individually valved.
3. All inlets must discharge at a depth of at least twelve (12) inches below the pool overflow level.

4. Floor inlets when used must be placed at a minimum of fifteen (15) foot intervals and the distance from these inlets to the wall must not exceed fifteen (15) feet.
5. Pools utilizing pre-manufactured overflow gutters with self-contained inlets are exempt from the above requirements, but must meet manufacturer's specifications for inlets.

G.MAINDRAINS

All pools must be provided with a minimum of two maindrains, connected to a common line and evenly spaced at the deepest section of the pool to facilitate proper bottom circulation and permit the pool to be completely and easily emptied.

1. Each main drain must have the capacity to handle 100 percent of designed turnover rate.
2. Openings of the grating must be at least four (4) times the area of the suction line. No direct connections to sewers are permitted.
3. Grate openings must be between one-half (1/2) inch and one (1) inch wide, inclusively. All main drain grate covers must be securely fastened in place.
4. All pools must comply with the APSP 7 standard for entrapment avoidance.

H.STEPS, LADDERS, DIVING PLATFORMS AND DIVING TOWERS

Steps and ladders must be made of an impervious material and designed so that they are easily cleaned. They must be designed and constructed to dry completely so that no water will be left on them when the pool water is lowered.

1. If the vertical distance from the bottom of the pool to the deck or walk is over two (2) feet, steps or ladders must be provided at the shallow end of the pool. If the pool is over thirty (30) feet wide, steps or ladders must be provided on each side of the deep portion of the pool, and. Ladders must be located so that divers do not need to turn back in order to reach them. Step-holes must have a contrasting color to the wall in which they are placed.
2. Steps leading into the pool must be of non-slip design, have a minimum tread of twelve (12) inches, and have a maximum rise or height of ten (10) inches. Abrupt drop-offs and submerged projections into the pool are prohibited unless guarded by handrails. The stairs must have a two (2) inch wide contrasting color tread edge.
3. Pool ladders must be corrosion-resistant and equipped with non-slip treads. All ladders must be designed to provide a handhold and must be rigidly installed. The minimum clearance between any ladder the pool wall is between three (3) and five (5) inches, inclusively. If steps are inserted in the walls or if there are step holes, they must be designed so that they may be cleaned readily and arranged to drain into the pool to prevent accumulation of dirt thereon. Step holes must have a minimum tread of five (5) inches and a minimum width of fourteen (14) inches.
4. There must be a handrail at the top or both sides of steps, step holes, and ladders, extending over the coping or edge of the deck.
5. Supports, platforms, and steps for diving boards must be of substantial construction and sufficient structural strength to safely carry the maximum anticipated loads. Steps must be of corrosion-resistant material, easily cleanable, and of non-slip design. Handrails must be provided at all steps and ladders leading to diving boards more than one (1) meter high must be protected with guard railings.
6. Starting blocks must be of sound construction and securely fastened to the deck when in use. They must be capable of being removed when not in use.

I.HOSEBmBS

A sufficient number of those connections must be provided to enable proper cleaning of the pool and deck area.

1. The maximum hose length allowed for each hose bibb is fifty (50) feet.
2. Each hose bibb must be protected by a backflow prevention device as prescribed by the International Plumbing Code.
3. Water pressure and volume must be sufficient to enable proper cleaning to be done.

J. SUCTION CLEANERS

Equipment must be provided to remove sediment, sludge, and other accumulations from the bottom of the pool.

1. The pool must have an approved suction cleaner of the built-in or portable type.
2. There must be sufficient suction and capacity to remove all accumulations from the pool bottom.
3. Vacuum pipes must be at least one and one-half (1 1/2) inches in diameter and vacuum hoses must have a diameter of at least one and one-half (1 1/2) inches.
4. Vacuum suction lines and external connections must not be readily accessible to anyone other than persons responsible for pool maintenance.

K. EQUIPMENT ROOMS/RECIRCULATION SYSTEMS/APPURTENANCES

1. The recirculation system must contain the following equipment:
 - a. Pump
 - b. Hair and lint strainer
 - c. Filters
 - d. Disinfection equipment
 - e. Chemical additive equipment
 - f. Pipe and fittings to connect the various parts of the system
2. The recirculation system must be capable of providing the following turnover rates:
 - a. Pool - minimum of six (6) hours
 - b. Wading pools - minimum of one (1) hour
 - c. Spa or hot tub- minimum one half (1/2) hour
3. Pumping Equipment
 - a. If the pump or suction piping is located above the overflow level of the pool, the pump must be self-priming.
 - b. The pump or pumps must be capable of providing flow adequate for the backwashing of filters.
 - c. Under normal conditions, the pump or pumps must supply the recirculation rate of flow at a dynamic head of at least fifty (50) feet for pressure sand type filters or at least eighty (80) feet for pressure diatomaceous earth type filters.
4. Hair and Lint Strainer- On recirculation systems where the pump precedes the filter, a hair and lint strainer must be provided. The hair and lint strainer must be designed as follows:

- a. The strainer must be constructed of corrosion resistant material.
- b. The area of the strainer openings must be at least ten (10) times the area of the pipe supplying water to the strainer.
- c. A maximum width or diameter of the strainer mesh openings one-eighth (1/8) inch.
- d. The strainer must be constructed so that it can be easily taken apart for cleaning.

L.DISINFECTANT AND CHEMICAL FEEDERS

Pools must be equipped with a chlorinator, hypochlorinator, brominator, or other disinfectant feeder or feeders that meet the following requirements:

1. All chemical feeders must comply with the standards of the Uniform Pool, Spa, and Hot Tub Code for and must be of sturdy construction and materials that will withstand wear, corrosion, or attack by disinfectant solutions or vapors and that are not adversely affected by repeated regular adjustments or other conditions anticipated in the use of the device.
2. The feeder must be capable of being easily disassembled for cleaning and maintenance.
3. Feeders must be designed and constructed to preclude stoppage from chemicals intended to be used or foreign materials that may be contained therein.
4. The feeder must incorporate failure-proof features so that the disinfectant cannot feed directly into the pool, the pool piping system, water supply system, or the pool enclosure under any type of failure of the equipment or its maintenance.
5. Have a device or method to prevent air lock of the pump or recirculation system when the disinfectant is introduced at the suction side of the pump.
6. Feeders must have a graduated and clearly marked dosage adjustment device to provide flows from full capacity to 25 percent of such capacity. The device must be capable of continuous delivery within 10 percent of the dosage at any setting and of supplying dosages at the rates needed to provide the levels required by these regulations and standards.
7. Owners applying chemicals for controlling pH through chemical feed equipment shall provide equipment:
 - a. With adequate size and design to allow routine cleaning and maintenance;
 - b. With material resistant to chemical action;
 - c. With means for automatic shut off when pool flow is interrupted;
 - d. With means for automatic or mechanical chemical feed equipment for pH control on all pools of fifty thousand (50,000) gallon volume or greater;
 - e. That is automatic, metered, and controlled as directed by the manufacturer or the Manager.

M.SAND FILTERS

Filtration equipment must be provided on all pools.

1. All sand-type filters, whether of the gravity or pressure type, and including high-rate filters, must comply with the standards of the Uniform Pool, Spa, and Hot Tub Code covering them. Specifications on the media to be used by each filter must be listed on a data plate attached to the filter.
2. Pressure rapid sand filters must be designed for a filter rate of three to five (3-5) gallons per minute per square foot of filter area.

3. Filtering media must be installed and maintained in accordance with the manufacturer's specification.
4. High rate sand filters must be designated to operate at a filter flow rate of fifteen to twenty (15-20) gallons per minute per square foot of filter area.
5. The Underdrain system must be of corrosion-resistant and enduring material designed to provide even collection or distribution of the flow during filtration and backwashing.
6. The filter system must be provided with pressure indicators that indicate the condition of the filters. The filter system must have an air relief device at or near the high point of the filter. The backwash discharge line must have a sight glass.
7. The filter system must be designed with necessary valves and piping to permit:
 - a. Filtering to the pool.
 - b. Individual backwashing of filters to waste at a rate of not less than fifteen (15) gallons per minute per square foot of filter area.
 - c. Isolation of individual filters for repairs while other filters are in service.
 - d. Complete drainage of all parts of the system.
 - e. Maintenance, operation, and inspection.
8. Each pressure type filter tank must have an access opening of not less than a standard eleven (11) inch by fifteen (15) inch manhole and cover.
9. Devices with reasonably accurate dosage control features must have to add coagulants before the filters.
10. On pressure type filters, the tank and its integral parts must be constructed of substantial material capable of withstanding continuous anticipated usage and must be designed for a pressure safety factor of four (4) based on the maximum shutoff head of the pump. This shutoff head, for design purposes, must not be less than fifty (50) pounds per square inch.
11. A rate of flow indicator must be properly installed so that the recirculation rate of the pool may be calculated.

N. DIATOMACEOUS EARTH FILTERS

1. All diatomaceous earth type filters, whether of the vacuum or pressure type, must comply with the standards of the Uniform Pool, Spa, and Hot Tub Code concerning such filters.
2. Rate of Filtration: The size of the filter area must not allow the filtration rate to exceed 1.5 gpm/sq. ft. or the rate specified by the Uniform Pool, Spa, and Hot Tub Code for the specific filter in use.
3. Where body feed is provided, the device must be accurate within ten (10) percent and dependable, and must be capable of continually feeding within a calibrated range, adjustable from two to six (2-6) ppm, at the design capacity of the recirculation pump.
4. The filter and all component parts must be of such materials, design, and construction to withstand normal continuous use without significant deformation, deterioration, corrosion, or wear that could adversely affect filter operation.
5. The filter must be so designed and constructed, or provided, to preclude the introduction of appreciable quantities of filter-aid into the pool during precoat operations.
6. The filter system must be provided with pressure, vacuum, or compound gauges that indicate the condition of the filter.

7. The filters must be designed and installed so that they are easily disassembled and provide adequate working space above and around the filter to permit the removal and replacement of any part and for proper maintenance.
8. The filter system must be designed with necessary valves and piping to permit:
 - a. Filtering to the pool.
 - b. Individual backwashing of filters to waste at a rate of not less than fifteen (15) gallons per minute per square feet of filter area
 - c. Isolation of individual filters for repairs while other units are in service.
 - d. Complete drainage of all parts of the system.
 - e. Maintenance, operation, and inspection.
9. In vacuum-type filter installations where the circulating pump is two (2) horsepower or higher, an adjustable high vacuum automatic shutoff must be provided to prevent damage to the pump by cavitation.
10. All filters must be equipped for cleaning by one (1) or more of the following methods: backwashing, air pump-assist back washing, spray wash (mechanical or manual) or agitation.
11. Provision must be made for complete and rapid draining of the filter.
12. A rate-of-flow indicator must be properly installed so that the recirculation rate of the pool can be calculated.

O. CARTRIDGE FILTERS

1. Cartridge filters must meet Uniform Pool, Spa, and Hot Tub Code standards.
2. Maximum flow rate must be 0.375 gpm/ .
3. Air relief valve and pressure gauges must be in place and in good operating condition.
4. Filter by-passes of any kind are prohibited.
5. A rate of flow indicator must be properly installed so that the recirculation rate of the pool can be calculated.

P. MAKE-UP WATER FACILITIES AND CROSS CONNECTIONS

All pool makeup water must be protected by a backflow prevention device as prescribed by the International Plumbing Code.

If a pool fill spout is installed, it must be located under a low diving board or adjacent to a handrail and must not extend past the edge of the pool more than 1-1/2 times the diameter of the pipe.

Water pressure must be adequate to allow the fill line to operate at full valving and not interfere with water pressure in the other parts of the facility.

All other accessories to the recirculation system, such as chemical solution feeders and water fed chlorinators must be protected against backflow by an air gapped supply line or with a backflow prevention device as prescribed by the International Plumbing Code.

Q. PIPING SYSTEM

The piping system must be so designed to reduce friction losses to a minimum.

1. Flanged joints or unions must be inserted at intervals to pennit any part of the system to be taken down quickly for cleaning or repairs. The piping system of the pool must be painted in distinguishing colors according to the following color schedule:

Green-----filtered water lines
Yellow-----raw or make-up water lines
Black-----waste water lines
Red-----heating lines
Blue-----vacuum lines

2. A flow diagram of the entire system with operating instructions must be posted in close proximity to the filtering equipment.

R. MECHANICAL ROOM

This room have at least the minimum clearance specified by the manufacturer for serviceability, access and, operation around all pool mechanical and recirculation equipment.

The equipment must be placed in such a manner that each piece can be serviced and maintained without interference from other equipment.

The room must not be accessible from the shower rooms or from the pool area by unauthorized persons.

The floors must have a slope of not less than 1/4 inch per foot and not more than 1/2 inch per foot directed to adequate drains. The floor drains must be of such number and placement so as to ensure that there will be no standing water. The drains from the mechanical equipment room must not discharge to a sewer or drain that may overload.

MisceUaneous equipment, chemicals, and appurtenances must not be stored on or among the recirculation equipment.

A clear work and walk area must be maintained around, to, and from the recirculation equipment. Any storage areas in the filter room must be away and separate from all recirculation equipment and plumbing.

S. LIGHTING ELECTRICAL REQUIREMENTS

Underwater lights must be sufficient to see aU areas of the pool, including the bottom, during all hours of operation. Artificial lighting must be provided at all swimming pools that are to be used at night or that do not have adequate natural lighting so that all portions of the pool, pool decking, and immediate pool area, may be readily seen without glare.

A minimum of three (3) foot candles of light must be provided to illuminate the pool and deck areas, provided this is sufficient to meet the requirements above taking into account environmental factors and structural design features of the pool.

For indoor pools, the combination of overhead and underwater illumination must not be less than 10 foot candles at the pool water surface.

Lighting must be placed so that the surface of the water can be observed without glare.

All electrical wiring must conform to the requirements of the International Building Code.

No overhead electrical wiring may pass within 20 feet of the pool enclosure.

T. DRESSING ROOMS

All pools *are* required to have dressing rooms except for limited access pools. Dressing rooms, toilet facilities and shower rooms must be handicapped accessible. Dressing rooms must be satisfactorily designed, located, drained, equipped, kept clean, lighted, and ventilated.

1. The dressing rooms must be located adjacent to the locker or checkroom and showers.
2. Floors must have a minimum slope of one-fourth (1/4) inch slope per foot to the drains with no low spots that would permit water to stand.
3. Floors must be of smooth but non-slip finish, impervious to moisture, with no open cracks or joints. No carpeting is permitted.
4. Rooms must be well-lighted so that all parts are easily visible for cleaning.
5. The rooms must be ventilated so that they do not remain excessively damp.
6. Hose bibs must be provided to enable the entire dressing room to be conveniently flushed by hose.
7. The material used for walls, partitions, and furniture must be capable of being easily cleaned and not being damaged by frequent hosing, wetting, or disinfection.

U.TOILETS

Toilet facilities must be provided at all pools except limited access pools. All toilet facilities must comply with the requirements of the International Building Code.

1. Toilet facilities must be provided for each sex and accessible to disabled persons.
2. Flush water closets and urinals must be provided, kept clean, and properly maintained.
3. All fixtures must be properly protected against back siphonage.
4. All fixtures must be so designed that they may be easily cleaned and maintained.
5. Toilet floors must be constructed of impervious material with no open cracks or joints and must have a smooth, non-slip finish and slope of not less than one-fourth (1/4) inch per foot toward the drains.
6. Partitions, walls, and ceilings must be constructed of material not adversely affected by steam, water or a disinfectant.
7. Toilet rooms or areas must be lighted so that they are easily visible for cleaning.
8. Toilet rooms must be ventilated so that no odor nuisance may exist.
9. Hose bibs must be provided for convenient hosing of the toilet rooms or area.
10. Toilet rooms must have a hand washing lavatory provided with soap and sanitary towels or hand drying devices. Each hand washing lavatory must be in good repair and provided with hot (minimum of 90F) and cold water by means of a mixing valve.

V.SHOWER FACILITIES

Shower facilities with warm water and soap must be provided at all pools except limited access pools.

1. Separate shower facilities must be provided for men and women and must be located so that bathers must pass from the shower room directly into the pool area.
2. The minimum number of showers provided must be in proportion of one (1) to each forty (40) bathers expected at the time of maximum load.
3. The ceilings, walls, and floors of the shower room or area must be constructed of smooth, impervious, easily cleanable material, not adversely affected by steam or water.

4. Floors must be constructed of impervious material with no open cracks or joints and have a smooth non-slip finish with a slope of not less than one-fourth (1/4) inch per foot toward the drain.
5. Showers must be supplied with water at a temperature of at least ninety (90) degrees at a minimum rate of three (3) gallons of water per shower per minute. Thermostatic tempering or mixing valves must be installed to prevent scalding of bathers.
6. Shower rooms must be provided with at least ten (10) foot candles of light so that all parts are visible for easy cleaning.

W.EQUIPMENT

All equipment used for pool operation is subject to the Manager's approval. The Manager may permit an experimental installation, but if the Manager finds the results to be unsatisfactory, the installation must be replaced with accepted design, equipment, or materials.

ARTICLE IJJ. REALTR ANDSAFETY STANDARDS

All pools must conform to these minimum health and safety standards.

A.DISINFECTION

1. Disinfectant Equipment, General:

All pools must be provided with an automatic or mechanical means of adding a disinfectant to the pool water.

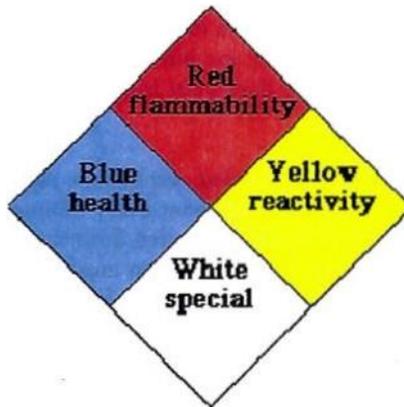
Manual addition of chemicals or chemical solutions will be allowed only under special or emergency situations requiring the pool be closed. During those situations, the pool must remain closed at least one pool turnover or until enough time has lapsed to allow the chemical to thoroughly disperse throughout the pool water. After hand treatment for breakpoint disinfection and algae prevention, use of the pool may be resumed when the free disinfectant level drops within the ranges specified in Article ID Sec.I.3 of these regulations.

- a. Equipment must be capable of being easily disassembled for cleaning and repair.
- b. Equipment must be constructed of corrosion-resistant materials.
- c. Equipment must be constructed to permit repeat adjustments without loss of output rate accuracy.
- d. Equipment must be constructed to minimize a stoppage from debris and chemicals.
- e. Equipment must be designed specifically for the type of disinfectant to be used.
- f. Equipment must be provided with controls for adjusting rate of flow of disinfectant.
- g. Equipment must conform to the Uniform Pool, Spa, and Hot Tub Code.
- h. Y strainers must be installed in the disinfectant feeder line.
- i. Connection to an external water supply for disinfection system operation is prohibited.

2. Chlorine Gas Equipment:

- a. Housing: A building or room must be provided to be used exclusively for the purpose of housing the gas chlorine equipment. This room must be located at ground level.

- b. Door: The gas chlorine room must have a lockable door that does not open to the pool or deck areas. The door must open to the outside of any building in which it is located. The door must contain a shatterproof, gas tight window. The door must have "panic-bar" type hardware permitting the door to be easily opened from the inside.
- c. Exhaust Ventilation: Sufficiently powered, ventilation equipment must be provided to allow one complete air change in the gas chlorine room every minute. The air exhaust duct must be located within six (6) inches of the floor level. A louvered fresh air intake must be provided near the ceiling to operate as a make-up air supply. The exhaust fan must be wired to a control switch located outside and near the door of the gas chlorine room. The exhaust duct must terminate at a point not less than eight (8) feet above surrounding grade. This duct must terminate outside of the building away from any occupied area or fresh air intake.
- d. Lighting: A minimum of ten (10) foot candles of illumination must be provided in the gas chlorine room. Switches to control the lighting must be located outside the room near the door.
- e. Chlorine Feeder Seals: A new washer or gasket approved for use with chlorine gas must be used each time a chlorine cylinder is connected to the chlorinator. Spare washers/gaskets must be kept on site.
- f. Vent Lines: Vent lines and pressure relief valves from the chlorinator must terminate away from any occupied area or fresh air intake.
- g. Test Kit: A leakage test kit containing ammonia water (26 Baume), and a sponge, swab or other applicator must be provided for detecting chlorine gas leaks.
- h. Respiratory Protection Equipment: At least one Self-Contained Breathing Apparatus (SCBA) must be provided. The SCBA must have a minimum thirty (30) minute capacity and be approved for use by the National Institute for Occupational Safety and Health. The SCBA must be kept in a conspicuous location outside the gas chlorine room that is easily accessible to pool employees. Monthly checks must be made on the working condition of the SCBA and records of the results kept. Pool employees must be trained in the proper use of SCBA equipment.
- i. Chlorine Cylinders: Chlorine cylinders must be anchored in an upright position to prevent falling over. A valve stem wrench must be kept on any cylinder in use, so the supply can be shut off quickly in case of an emergency. The valve protection hood must be kept in place, except when the cylinder is connected to the feeder. Empty chlorine gas cylinders must be tagged as such. Full and empty chlorine gas cylinders must be stored only in the chlorine room.
- j. Platform Scales: Manufacturers' requirements regarding use of platform scales for chlorine cylinders must be complied with. Platform scales must indicate gross weight within one half (1/2) pound accuracy.
- k. The chlorinator must be a vacuum-feed type, capable of delivering chlorine at its maximum rate without releasing chlorine gas to the atmosphere.
- l. The chlorinators must be designed to prevent the backflow of water into the chlorine regulator.
- m. The gas chlorine room must have a hazardous material classification sign affixed to the entry door. This sign must use the National Fire Protection Association Hazard Rating System for gas chlorine as shown



- n. Gas Chlorine Booster Pump: Controls for the gas chlorine booster pump and pool water recirculation pump must be interlocked so that the booster pump cannot operate when the pool water pump is off. The gas chlorine booster pump must not be operable during any filter backwash cycle.

3. Chlorinated Hypochlorites And Chlorinated Isocyanurates:

- a. Feed must be positive under all conditions of pressure in the circulating system, and without artificial constriction of the pump suction line, whether this line is under vacuum or pressure head.
- b. Provisions must be made to insure constant feed with varying supply or back-pressure.
- c. Positive features must be provided to prevent back-flow from recirculation system to the solution container, and provision for reducing to a minimum the entry into the pool of free calcium released from calcium hypochlorite.
- d. Provision must be made to prevent siphoning of hypochlorite solution when the recirculation pump and hypochlorinator are both turned off. This applies to above pool level installations only.
- e. The size, design, and material of equipment and piping used to apply chemicals to the water must be capable of being cleaned and free from clogging, preferably of the positive displacement type. All material used for this equipment and piping must be resistant to action of chemicals to be used therein.

4. Other Disinfectant Equipment And Methods:

Other disinfecting equipment such as ozone, hydrogen peroxide, or any other materials, may be used if they:

- a. Have been adequately demonstrated to the Manager to provide a satisfactory residual effect that is easily measured.
- b. Provide assurance that results are effective under conditions of use to meet the water quality standards set forth in these regulations and not be dangerous to public health, create objectionable physiological effects, or impart toxic properties to the water.

B. STORAGE AND HANDLING OF CHEMICALS

- 1. All chemicals must be kept out of reach of children and unauthorized personnel.
- 2. Chemicals must be stored in original containers; with the lids securely in place; out of the sunlight; in a cool, dry, well ventilated area. Chemicals supplied in bulk bag form must be stored in clearly marked corrosive resistant containers with tightly fitted lids.
- 3. Chemicals must not be stored near a heat source, open flame, or electrical equipment.

4. Where required by the manufacturer, appropriate protective equipment must be worn while handling chemicals. This equipment includes, but is not limited to, rubber or plastic gloves, face shield or goggles, dust or mist masks, and rubber or plastic aprons.
5. Liquid chemicals must not be stored above or adjacent to dry chemicals.
6. Pool chemicals must not be stored in the same area as insecticides, herbicides, fertilizers or liquid petroleum products.
7. Chemicals must not be stored above eye level.
8. Shelving used for chemical storage must be secure.
9. Acids must be stored separately from bases.
10. Chemicals packaged in absorbent containers must be kept at least six (6) inches off the floor on non-flammable surfaces.
11. All chemical storage areas must be kept clean.
12. Manufactures label instruction must be complied with.
13. Separate measuring devices for each chemical must be used. These measuring devices must be clean, dry and constructed of material compatible with the chemical to be measured. Glass must not be used.
14. Chemicals must be added to water; water must never be added to chemicals.
15. Oxidizers must not be mixed with any other chemicals.
16. Chemicals must not be mixed with powdered chlorine or liquid chlorine.
17. Smoking, eating, or drinking must not be allowed when using chemicals.

C.FENCING

An effective fence or barrier must surround the outside of the deck area of all outdoor pools to prevent unauthorized access by small children. This requirement applies to existing and new pools.

All fences and barriers must:

1. Be at least 60" in height.
2. Not have an opening larger than 4" in width, except for doors and gates.
3. Be located beyond the minimum deck space requirements, but located to isolate the area intended for swimmers.
4. Be constructed so that the pool is visible through the barrier.
5. Have self-closing gates or doors equipped with positive latching closure at a height of at least 4'6" (54") above the ground. All gates and doors must open away from the pool area.
6. Have handicap accessible entrances.

D.SWIMMER LOAD

1. DIVING AREA: A maximum of two (2) persons are permitted for the area within a ten (10) foot radius of any diving board or platform as measured from the end of the diving board.

2. AREA: A maximum of one (1) person for each twenty-four (24) square feet of pool is allowed. This area is that part of the pool deeper than three and one-half (3 1/2) feet, excluding the diving area.
3. NON- AREA: A maximum of one (1) person for each ten (10) square feet of pool that is less than three and one-half (3 1/2) feet deep.
4. A pool must not be operated when the swimmer load exceeds those specified above.

E.SWIMMER SAFETY

1. Construction of all equipment, appliances and the operation of the pool must be such as to reduce to a minimum the danger of drowning and injury to bathers.
2. Every pool must have a competent, trained lifeguard in complete charge of the pool who has authority to enforce all rules of safety, provided however, that for limited access pools it is not necessary to employ or maintain a lifeguard on duty. Lifeguards must have current certifications in first aid and (CPR) Cardiopulmonary Resuscitation, and one of the following: American Red Cross Lifeguard Training; YMCA Lifeguard; Lifeguard-National Lifeguard Service, Canada; National Pool and Waterpark Lifeguard Training; or other current nationally recognized lifeguard training program. Lifeguards must be on duty at all times when a pool is open for use by the bathers.
3. At pools where no lifeguards are required, a warning sign must be placed in plain view and must state "WARNING - NO LIFEGUARD ON DUTY" with legible letters at least four (4) inches high.

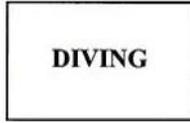
Example:

WARNING
NO LIFEGUARD
ON DUTY

4. Each limited access pool must have a manager or other designated responsible person on duty at any time swimming or bathing is permitted.
5. Where lifeguards are required, there must be a sufficient number of lifeguards on duty to provide reasonable general supervision of the activities of all persons in the pool area, with detailed supervision and close observation of those persons in the pool water. Further, there must be a number on duty to enable periodic relief or rest periods.
6. Where lifeguards are required, a minimum of one (1) lifeguard per fifty (50) persons (or fraction thereof) in the pool water is required.
7. Every pool must be equipped with one (1) or more heaving lines, rescue tube, or ring buoys having a maximum of fifteen (15) inches diameter. The ring buoy must have an attached line or rope at least equal in length to the maximum width of the pool. In pools of twenty-eight (28) feet in width or less, a shepherd's crook or reach pole with a minimum length of fourteen (14) feet may be substituted for the ring buoy.
8. Where lifeguards are required, an elevated seat for the lifeguard must be provided in the areas between the five (5) foot depth and the deep water and within two (2) feet of the edge of the pool and must be high enough to give the lifeguard a complete and unobstructed view of the water. Such elevated seat may be movable so that it can be removed during periods of competition.
9. A guard line separating the shallow portion from the deep portion of the pool must be provided across the pool at the five (5) foot depth or at the break in the slope of the pool bottom, if this occurs at a shallower depth. The guard line must be made of approved material such as polyethylene or nylon and be provided with floats made of material of contrasting color located at not more than five foot intervals. The guardline rope must be a minimum of three quarter (3/4) inch diameter and be securely attached at both ends while the pool is in operation. Guardlines are not required during periods of lap, competitive or supervised training. Wave pools and catch pools are exempt from lifeline requirements.

- 10.** Safety regulations must be posted in the pool area stating:
 - a. The maximum number of bathers who may use the pool at one time; and
 - b. The normal hours that the pool is open; and
 - c. That the pool use is prohibited at any other time; and
 - d. The location and instructions for use of the emergency telephone or equivalent alarm system as required in this section, E.14, of these regulations.
 - e. Warning persons with any considerable area of exposed subepidermal tissues, cuts, or similar conditions that these might become infected and advising them not to use the pool.
 - f. Spitting, spouting of water, or blowing the nose in the pool is strictly prohibited.
 - g. Boisterous or rough play or running is not permitted in the pool area.
 - h. Bottles, crockery, glassware, or other hazardous objects are prohibited in the pool area.
 - i. Smoking is prohibited within the exterior wall/fence of pools.
- 11.** Springboard, diving platforms, and floats must be covered with an approved non-slip material.
- 12.** Springboards and diving board must be rigidly constructed and properly anchored with sufficient bracing to insure stability under the heaviest load. Waterproof shock absorbing pad or padding, 1/2" thick, must be placed on the deck surrounding all sides of the ladder for a minimum of six feet, at any diving structure of 3 meters or more.
- 13.** Every pool must be equipped with a standard first aid kit that is kept filled and ready for use. It must include at least the following items:
 - a. 1 package 1" x 3" adhesive compress
 - b. 1 package 2" x 3" non-stick gauze pads
 - c. 1 package 1"x 5 yd stretch gauze bandage
 - d. 1 roll 1/2" x 10 yd adhesive waterproof tape
 - e. 4 oz. of Ophthalmic irrigating solution
 - f. 1 pair surgical scissors/trauma sheers
 - g. 1 pair stainless steel tweezers
 - h. 1 package of latex gloves
 - i. 1 pocket mask and face shield
 - j. 1 package of 3" x 3" gauze pads
 - k. 2 triangular bandages
- 14.** A telephone or an equivalent alarm system that can be used in emergencies must be available at all pools. The telephone or equivalent alarm system must be within the immediate pool area.
- 15.** At pools where lifeguards are required, a fully equipped backboard with at least 3 straps and a head immobilizer is required.
- 16.** All pools operated at night must be provided with sufficient artificial light to permit the main drains to be clearly visible from the deck.
- 17.** The depth of the water at the deepest point, shallowest point, the five (5) foot depth, and at the break between the shallow end and the deep end must be conspicuously marked on the deck of the pool and on the vertical walls of the pool. Depth markers must be in numerals of four (4) inches minimum height and a color contrasting with the background.

18. In areas of the pool that do not meet the minimum depth requirements for diving, the deck must be clearly marked with the statement "NO DIVING" in letters at least four (4) inches high. These areas must also be provided with a non-lettered no diving symbol similar to the following example:



19. All pools must comply with current APSP 7, American standard for suction entrapment avoidance.
20. All anti entrapment systems must be testable and proof of routine testing must be available.
21. All pool drain covers must comply with APSP 16, and proof of compliance must be available.

F. POOL WATER SUPPLY

1. The water supply serving the pool, plumbing fixtures, drinking fountains, showers, and other water using devices comply with the minimum sanitary standards for drinking water as set forth in the Colorado Primary Drinking Water Regulations. 5 C.C.R.1003-1
2. The water supply must be delivered at a sufficient rate to enable the pool and all other water using devices to be operated satisfactorily.

G. WATER TESTING EQUIPMENT

Every pool must be provided with water testing equipment for the following determinations:

1. A test-kit for determining the pH in the range of six and eight-tenths (6.8) to eight (8.0).
2. A test-kit for determining the residuals of the disinfectants in current use. This test kit must encompass the minimum to maximum range denoted in Article III Sec. A.I.3.
3. A test-kit for the determination of total alkalinity.
4. A test-kit for the determination of the cyanuric acid concentration if it is being used as a chlorine stabilizer.
5. A test-kit for determination of calcium hardness.
6. A thermometer accurate to +2 F must be available to check the temperature of the water in the pool itself.

All test-kits must have reagents that are not outdated. Additional testing equipment may be required if materials other than those mentioned in these regulations are used.

H. BACTERIAL QUALITY

1. The bacterial quality of the water in pools must not have a total coliform density in excess of one per 100 rnl at any time.
2. Any water sample obtained from pools must not contain more than 200 bacteria per milliliter, as determined by the Standard (35 degrees Celsius) Plate Count, per the 18th edition of Standard Methods for the Examination of Water and Wastewater.
3. The water samples used in any bacterial analysis will be examined using the procedures outlined in the current edition of Standard Methods for the Examination of Water and Wastewater.

4. Should any two consecutive water samples taken from pools exceed the bacterial standards in "1" and/or "2" above, the facility must be immediately closed until the bacterial quality of the water is within the required parameters.

I. CHEMICAL QUALITY

1. Chemicals used for algae control are subject to the Manager's approval.
2. Any pool having any of the conditions below must be closed immediately:
 - a. Disinfection level below minimum requirement.
 - b. pH below the minimum requirement, or above maximum requirement.
 - c. Water temperature exceeds 104 F.
 - d. Insufficient water clarity results in the main drains not being clearly visible from the deck, or the main drain grates are missing or are not securely fastened in place.
 - e. The emergency phone or equivalent alarm system is not available, not easily accessible, or is malfunctioning.
 - f. Any other condition determined by the Manager to pose an imminent public health risk.
3. The following chemical parameters required for any pool.

PARAMETER	REQUIRMENTS	
	Min.	Max.
Free Available Chlorine, ppm	1.0	5.0
Bromine, ppm	1.5	5.0
Total Alkalinity, ppm	70	200
pH	7.2	8.0
Water Temperature, F	77	104
Hydrogen Peroxide (if applicable), ppm	20	100
Copper, ppm	0.25	0.95
Silver, ppm	0.15	0.5
Ozone, ppm (supp. oxidizer only),	<i>NIA</i>	0.1
Cyanuric Acid, ppm	0	50
Total Iodine, ppm	0.4	<i>NIA</i>
Free Iodine	0.8	<i>NIA</i>
Total dissolved solids, ppm	1000	1500
Calcium hardness, ppm	150	600* 250 ppm for spas

J. TURBIDITY

1. Pool water must have sufficient clarity so that the grate openings on the main drains, which must be properly secured, are clearly visible from the deck. Failure to meet this requirement is grounds for immediate closure of the pool.
2. No algae or foreign materials may be present in the pool water.

K. POOL OPERATION

Operators of all pools shall maintain a daily record of information regarding operations of the pool. Information in this record must include, but not be limited to disinfectant levels, pH, *total* alkalinity, temperature, flow meter readings, and hours of operation and condition of the self contained breathing apparatus. AU records must be maintained for a minimum of 6 months for immediate review by the Manager upon request

L. HEATING AND VENTILATION

1. Bath houses, dressing rooms, shower rooms, and toilet rooms must be properly ventilated.
2. Ventilation of indoor pools must be so designed that bathers will not be subjected to drafts.
3. All heating units must be isolated or protected from contact by bathers to prevent injury.
4. The heating units in dressing rooms, shower rooms, and toilet rooms must be capable of maintaining a minimum temperature of seventy (70) degrees Fahrenheit.
5. The pool room heating units must be capable of maintaining a minimum temperature of seventy-five (75) degrees Fahrenheit.

M. BATHER CONTROL

1. All bathers, before entering the pool, must be required to take a cleaning shower bath using warm water and soap. All soap suds must be rinsed off before entering the pool. Soap must be provided for each shower unit.
2. Persons having any considerable area of exposed subepidermal tissues, cuts, or the like must be warned that these may become infected and must be advised not to use the pool.
3. Spitting, spouting of water, or blowing the nose in the pool must be strictly prohibited.
4. Boisterous or rough play or running must not be permitted in the pool area.
5. Bottles, crockery, glassware, or other hazardous objects are prohibited in the pool area.
6. Smoking is prohibited within the exterior walls/fences of pools.
7. Towels, bathing suits, combs, brushes, and all other such articles are furnished by the pool management, they must be clean at the time of issue to the patron and must have been cleaned and sterilized in a manner acceptable to the Manager.

N. WASTE DISPOSAL

1. The sewer system must be installed, operated, and maintained according to law, and be adequate to serve the facility, including bathhouse, locker room and related accommodations.
2. The sewer line serving the backwash for the filter must be 1-1/2 times the size of the backwash line or provide a containment vessel capable of holding a minimum of 5 minutes volume of backwash water at the backwash design rate.
3. There must be no direct physical connection between the sewer system and any drain from the pool or recirculation system.
4. Any pool, gutter drain, or overflow from the recirculation system when discharged to the sewer system must connect through a suitable air gap so as to preclude the possibility of backflow of sewage or waste into the pool piping system.
5. The sanitary sewer serving the pool and auxiliary facilities must discharge to the public sewer system.

O. RIGHT OF ENTRY

1. The Manager must conduct surveys, investigations, and inspections and must collect such samples of water and must review such laboratory analyses as may be necessary to determine that every pool complies with these regulations.
2. The right of entry into the premises of any licensee is a condition to the granting of a license.
3. It is unlawful to hinder, prevent, or refuse to permit any lawful inspection.

P. DISEASE CONTROL

1. Any person with a communicable disease that is transmittable by water must not be permitted to use the pool facilities.
2. Should feces be found in the pool at any time, the following procedure must be followed:
 - a. The pool must be closed and all bathers removed.
 - b. Solid matter must be removed.
 - c. Water chemistry must be checked. If disinfection levels are within required parameters, the pool must remain closed for at least 60 minutes and then re-opened. If disinfection levels are not within the required parameters, the pool must be closed and the disinfection level restored. The pool may re-open 60 minutes after acceptable disinfection levels have been attained.
 - d. If feces are in the form of diarrhea, the pool must be closed, superchlorinated (or equivalent), remain closed for 24 hours, and then re-opened if disinfection levels are within required parameters.

Q. FACILITIES TO BE KEPT CLEAN AND IN GOOD REPAIR

All pools and appurtenances thereto must be maintained in a clean and sanitary condition at all times.

1. Visible dirt on the bottom of the pool must be removed once daily or more often if deemed necessary.
2. Visible scum or floating material on the surface of the pool must not be permitted and must be removed by flushing or skimming or other effective means.
3. The pool operator must be responsible for maintaining the sanitary quality of the pool water at all times.
4. The pumps, filters, disinfectant units, chemical feeders, heaters, and related appurtenances must be kept in operation at all times that the pool is in use and for each additional period as needed to keep the pool in compliance with these regulations.

Approved for publication by the Board of Environmental Health at the regular board meeting of October 12, 2006.

After a public rule making hearing at the regular board meeting on November 9, 2006, the Board of Environmental Health adopted these rules, and after public rule making hearings at the regular board meetings on March 8, 2007 and April 11, 2013, it amended them.

