

**Title 10**  
**DEPARTMENT OF HEALTH AND MENTAL HYGIENE**

**Subtitle 17 [SWIMMING POOLS AND SPAS] AQUATIC FACILITIES AND VENUES**  
**10.17.01 [Public Swimming Pools and Spas] Aquatic Facilities and Venues**

Authority: Health-General Article, §§2-102, 2-104, 18-102, and 20-303, Annotated Code of Maryland, and U.S.C. §8003

**Notice of Proposed Action**

[16-009-P-I]

The Secretary of Health and Mental Hygiene proposes to amend Regulations .01—, .02, .06—, .29, .31—, .51, and .53—, .54, repeal existing Regulations .03—, .05, .28-1, and .52, and adopt new Regulations .03—, .05, .06-1, .06-2, .18-1, .22-1, .22-2, .48-1, .48-2, .52, and .55 under **COMAR 10.17.01 Aquatic Facilities and Venues**.

**Statement of Purpose**

The purpose of this action is to:

- (1) Revise the subtitle and chapter name;
- (2) Update the incorporation by reference documents;
- (3) Revise the construction, partial construction, alteration, and replacement permit application process to facilitate a faster turnaround time of applications;
- (4) Incorporate new and innovative technologies and design;
- (5) Incorporate best management practices outlined by the Centers for Disease Control and Prevention;
- (6) Implement a standardization and auditing process for local health departments (LHDs) to interpret and enforce regulations; and
- (7) Make stylistic changes.

**Comparison to Federal Standards**

There is no corresponding federal standard to this proposed action.

**Estimate of Economic Impact**

**I. Summary of Economic Impact.** The proposed action will have an indeterminate economic impact on LHDs, owners of aquatic facilities and venues, other industry and trade groups, and the general public. LHDs will experience an increase in expenditures to perform additional inspections not previously done by LHDs. However, the magnitude of these expenditures is indeterminate due to the lack of standardization in inspections among the LHDs. Owners will be required to update their aquatic facilities and venues in order to bring them into compliance with the proposed regulations. Owners will also need to update their aquatic facilities and venues in up to three phases over several years, which will allow them to spread the financial burden over several years and allocate funds within their budgets to cover the cost of updates to their aquatic facilities and venues. Based on the number, type, and size of the renovation each aquatic facility and venue must complete to comply with the proposed regulations and the variation in cost, this will result in an indeterminate impact to owners.

Other industry and trade groups include pool and spa renovation companies. These companies will benefit from the renovations made to an owner’s aquatic facilities and venues because they will complete the updates to each of the aquatic facilities and venues. However, due to the variation in cost among each aquatic facility and venue this will result in an indeterminate benefit to renovation companies and manufacturers. The public will benefit from a decrease in waterborne outbreaks and injuries associated with aquatic facilities and venues; however, because it is difficult to quantify the number of individuals who will benefit from this reduction this proposal will result in an indeterminate impact.

**II. Types of Economic Impact.**

	Revenue (R+/R-)	
	Expenditure (E+/E-)	Magnitude

A. On issuing agency:	NONE	
B. On other State agencies:	NONE	
C. On local governments:	(E+)	Indeterminable

	Benefit (+)	
	Cost (-)	Magnitude

D. On regulated industries or trade groups:	(-)	Indeterminable
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E. On other industries or trade groups:	(+)	Indeterminable
F. Direct and indirect effects on public:	(+)	Indeterminable

**III. Assumptions.** (Identified by Impact Letter and Number from Section II.)

C. The magnitude of expenditures on LHDs associated with performing additional inspections is indeterminate due to the lack of standardization in inspections among the LHD. Some LHDs currently inspect aquatic facilities and venues frequently enough to meet the proposed regulations and will not have any additional expenditures associated with inspections. However, LHDs who currently inspect aquatic facilities and venues once per year will experience an increase in expenditures associated with inspecting aquatic facilities and venues more frequently.

D. Owners within the regulated industry will experience additional costs to bring their aquatic facilities and venues into compliance with the proposed regulations. To ease the financial burden, the regulated industry will be allowed to allocate funds within their budgets to cover the cost of renovations in order to bring their aquatic facilities and venues into compliance over several years. Owners in the regulated industry will need to complete simpler requirements by May 30, 2016. Other items required by the proposed regulations need to be completed by January 1, 2017, while final items need to be completed by January 1, 2018. These additional costs will vary among each aquatic facility and venue, resulting in an indeterminate impact.

E. Pool and spa renovation companies will benefit from this proposal by completing the renovations at the aquatic facilities and venues. Manufacturers will also benefit from this proposal by providing equipment and services to the renovation companies performing the updates to the aquatic facilities and venues. The timeframe allocated to owners to complete these renovations serve to spread the economic benefit to the industry and manufacturers over several years. However, due to the variation in cost among each aquatic facility and venue this will result in an indeterminate benefit to renovation companies and manufacturers.

F. The public will benefit from a decrease in waterborne outbreaks and injuries associated with aquatic facilities and venues because these changes will translate into fewer visits to primary care physicians, hospital emergency rooms, and urgent care centers.

**Economic Impact on Small Businesses**

The proposed action has a meaningful economic impact on small business. An analysis of this economic impact follows.

Each aquatic facility and venue is unique in its design, size, and compliance with current regulations. Pool and spa renovation companies and manufactures that are small businesses will benefit from the renovations made to aquatic facilities and venues. Additionally, owners of aquatic facilities and venues that are small businesses will experience the costs associated with renovations. Based on the number, type, and size of the renovation each aquatic facility and venue must complete to comply with the proposed regulations and the variation in cost, this will result in an indeterminate benefit to small businesses.

**Impact on Individuals with Disabilities**

The proposed action has no impact on individuals with disabilities.

**Opportunity for Public Comment**

Comments may be sent to Michele Phinney, Director, Office of Regulation and Policy Coordination, Department of Health and Mental Hygiene, West Preston Street, Room 512, Baltimore, MD 21201, or call 410-767-6499; TTY:800-735-2258, or email to dhmh.regs@maryland.gov, or fax to 410-767-6483. Comments will be accepted through February 22, 2016. A public hearing has not been scheduled.

**Editor’s Note on Incorporation by Reference**

Pursuant to State Government Article, §7-207, Annotated Code of Maryland, American National Standard for Public Swimming Pools (ANSI/APSP/ICC-1 2014); Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities (NSF/ANSI 50-2013); America National Standard for Residential Inground Swimming Pools (ANSI/APSP/ICC-5 2011); American National Standard for Aboveground/Onground Residential Swimming Pools (ANSI/APSP/ICC-4 2012); and American National Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs (ANSI/APSP-16 2011) have been declared documents generally available to the public and appropriate for incorporation by reference. For this reason, they will not be printed in the Maryland Register or the Code of Maryland Regulations (COMAR). Copies of these documents are filed in special public depositories located throughout the State. A list of these depositories was published in 43:1 Md. R. 10 (January 8, 2016), and is available online at [www.dsd.state.md.us](http://www.dsd.state.md.us). These documents may also be inspected at the office of the Division of State Documents, 16 Francis Street, Annapolis, Maryland 21401.

**.01 Purpose and Scope.**

A. The purpose of this chapter is to enact regulations that protect and promote the public health and safety of individuals at [public spas and pools] *aquatic facilities and venues* in Maryland. [Public pools] *Aquatic facilities and venues* include limited public-use pools, recreational pools, [and semipublic pools. Public spas include semipublic spas] *semipublic pools, public spas, semipublic spas, and public spray grounds*.

B. This chapter adopts construction standards, updates disinfection standards, recognizes certain new technologies and design concepts, and establishes minimum [criteria for public pools and spas] *standards for aquatic facilities and venues*.

**.02 Exclusions.**

This chapter does not apply to a:

A.—B. (text unchanged)

C. Pool or spa that is completely emptied of water, disinfected, and refilled with water between each use and that is intended for use or used by a single individual during each use; [or]

D. Pool [or a], spa, or *spray ground* at a bed and breakfast, if the bed and breakfast facility has eight or fewer guest rooms; or

E. *Private spray ground*.

**.03 Documents Incorporated by Reference.**

*The following documents are incorporated by reference in this chapter:*

A. American National Standard for Public Swimming Pools (ANSI/APSP/ICC-1 2014) except Articles 6.8, 6.9.1, 6.9.3, 7.1.6, 7.1.7, 7.1.7.1, 8.1.1, 12.3, 12.3.1, 12.3.2, 13.2.1.2, 13.2.3, 15.3.,17.4, 17.5.1, 18.1, 18.1.2, 18.1.2.1, 18.1.2.2, 18.1.2.3, 18.6, and 22.2.1, and except that in Appendix E, the term “shall” is substituted for “should” whenever it appears;

B. American National Standard for Public Spas, (ANSI/NSPI-2 1999), except Articles 7.6 and 7.6.1;

C. Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities (NSF/ANSI 50-2013);

D. American National Standard for Residential Inground Swimming Pools (ANSI/APSP/ICC-5 2011);

E. American National Standard for Aboveground/Onground Residential Swimming Pools (ANSI/APSP/ICC-4 2012);

F. American National Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs (ANSI/APSP-16 2011); and

G. 15 U.S.C. §8003, as amended.

#### **.04 Definitions.**

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

(1) “Agitated water” means an aquatic venue with mechanical means to discharge, spray, or move the water’s surface above and/or below the static water line of the aquatic venue so people are standing or playing vertically.

(1-1) “AF” means alkalinity factor.

(2) Alteration.

(a) “Alteration” means to:

(i) Change or modify an equipment room, a bathhouse, a component, or the configuration of an aquatic venue;

(ii) Move a component from one location or position to another; or

(iii) Install a new component.

(b) “Alteration” does not include a repair or replacement.

(3) “Approved” means found by the Secretary to be in satisfactory compliance with applicable statutes and regulations promulgated or enforced by the Secretary.

(4) “APSP” means the Association of Pool and Spa Professionals.

(5) “Aquatic facility” means a physical place that contains one or more aquatic venues and support infrastructure.

(6) Aquatic venue.

(a) “Aquatic venue” means an artificially constructed structure or modified natural structure where the general public is exposed to water intended for recreational or therapeutic purpose.

(b) “Aquatic venue” includes a public pool, spa, and spray ground.

(c) “Aquatic venue” does not include a private pool, spa, or spray ground.

(7) “Barrier” means a fence, wall, or a combination of a fence and wall that completely surrounds and obstructs access to the aquatic venue.

(7-1) “CF” means calcium hardness factor.

(8) “Cfm” means cubic feet per minute.

(9) “Component” means:

(a) A piece of aquatic venue equipment;

(b) A deck;

(c) A barrier;

(d) One or more skimmers;

(e) One or more filters, including piping and valves;

(f) A ventilation system;

(g) Lighting provided for water, deck, and walkways; or

(h) Pipe material for aquatic venue water.

(9-1) “CPR” means cardiopulmonary resuscitation.

(10) “Critical violation” means failure to comply with:

(a) Regulation .06 of this chapter;

(b) Regulation .06-1 of this chapter;

(c) Regulation .08 of this chapter;

(d) Regulation .21 of this chapter;

(e) Regulation .25 of this chapter;

(f) Regulation .28 of this chapter;

(g) Regulation .29 of this chapter;

(h) Regulation .40 of this chapter;

(i) Regulation .43 of this chapter;

(j) Regulation .44 of this chapter;

(k) Regulation .45 of this chapter;

(l) Regulation .46 of this chapter; and

(m) Regulation .48 of this chapter.

(11) “Deck” means surface areas serving the aquatic venue, including the dry deck, perimeter deck, and pool deck.

(12) “Department” means the Department of Health and Mental Hygiene.

(12-1) “DPD” means diethyl-p-phenylene diamine.

(13) Dry Deck.

(a) “Dry deck” means all pedestrian surface areas within the aquatic venue barrier not subject to frequent splashing or constant wet foot traffic.

(b) “Dry deck” does not include perimeter deck, pool deck or landscape areas.

(13-1) “EDTA” means ethylenediamine-tetraacetate.

- (14) "Flat water" means an aquatic venue in which the water line is static except for movement made by users usually as a horizontal use as in swimming or from diving spargers.
- (15) "Full compliance inspection" means an inspection that verifies compliance with this chapter.
- (16) "Gpm" means gallons per minute.
- (17) "Handhold" means a coping, horizontal bar, or cantilevered decking.
- (18) "Latch" means a device attached to a gate for the purpose of securing the gate closed.
- (19) Latch Release.
- (a) "Latch release" means a mechanism to disengage the latch to allow the gate to open.
- (b) "Latch release" includes but is not limited to an electronic lock, a key fob system, or a swipe card entry system.
- (20) "Lazy river" means an aquatic venue where water is moved by pumps or other means of propulsion that transports bathers over a defined path.
- (21) "Lifeguard" means an individual who is 15 years old or older and who has a valid lifeguard certificate from:
- (a) The American Red Cross;
- (b) The Boy Scouts of America, not including a lifeguard merit badge;
- (c) The Young Men's Christian Association;
- (d) Ellis and Associates' International Lifeguard Training Program;
- (e) Starfish Aquatics Institute; or
- (f) An organization with a lifesaving training program equivalent to that of the American Red Cross as determined by the Department.
- (22) Limited Public-Use Pool.
- (a) "Limited public-use pool" means a private pool which is made available for use by:
- (i) Children in family day care under the care of a family day care provider at a family day care home as defined in COMAR 13A.15.01; or
- (ii) An organized group, agency, or other person for swimming lessons or water safety training.
- (b) "Limited public-use pool" does not include a pool that is emptied of water, disinfected, and refilled with water between each use.
- (23) "Make-up water" means the potable water used to maintain the water level in a pool, spa, or within the surge tank of a spray ground.
- (24) "NSF" means the National Sanitation Foundation International.
- (25) "Operator" means a person who supervises, controls, conducts, or manages the operation of an aquatic facility or venue.
- (26) "Owner" means a person who has a legal interest in an aquatic facility or venue or in the property on which an aquatic facility or venue is or is to be constructed or altered.
- (27) "Oxidation reduction potential (ORP)" means a measure of the tendency for a solution to either gain or lose electrons.
- (28) "Perimeter deck" means the hardscape surface area immediately adjacent to and within four feet of the edge of the public pool, spa or spray ground.
- (29) "Person" means an individual, receiver, trustee, guardian, personal representative, fiduciary, or representative of any kind and any partnership, firm, association, corporation, or other entity.
- (30) "PHMB" means poly (iminoimidocarbonyliminoimidocarbonyliminohexamethylene hydrochloride) or polyhexamethylene biguanidine hydrochloride.
- (31) "Plummet" means the center of the end of the diving board over the water, in the position where it will be installed.
- (32) "Pool" means an artificial enclosure of water that is used for the immersion of the human body for recreation, therapy, or exercise, including a structure that is installed in the ground, above ground, outside, or in a building or portable structure.
- (33) "Pool deck" means the surface areas serving the aquatic venue, beyond perimeter deck, which is expected to be regularly trafficked and made wet by bathers.
- (34) "Ppm" means parts per million.
- (35) "Primary disinfectant" means chlorine or bromine.
- (36) Private Pool, Private Spa, and Private Spray Ground.
- (a) "Private pool," "private spa," and "private spray ground" mean a pool, spa, or spray ground that is:
- (i) Not open to the public;
- (ii) On a property on which not more than eight private residences are located; and
- (iii) Used exclusively by the residents of the property and nonpaying individuals invited to use the pool, spa, or spray ground by a resident.
- (b) "Private pool," "private spa," or "private spray ground" include a pool, spa, or spray ground at a private residence used for short-term rentals including weekly, monthly, or seasonal rentals.
- (37) "PSI" means pounds per square inch.
- (38) Public Pool, Public Spa, and Public Spray Ground.
- (a) "Public pool," "public spa," and "public spray ground" mean a pool, spa, or spray ground that is not a private pool, spa, or spray ground.
- (b) "Public pool" includes a:
- (i) Limited public-use pool;
- (ii) Recreational pool; and
- (iii) Semipublic pool.
- (c) "Public spa" includes a semipublic spa.
- (39) "Recreational pool" means a pool that:
- (a) Is not a limited public-use pool, private pool, semipublic pool, or spray ground;
- (b) Is provided as the owner's primary business or the facility's primary purpose, for example, a swim club or similar facility;
- (c) Is open for general admission to the public;
- (d) Is available to an individual paying a fee for use of the pool;
- (e) Is equipped with a sliding board, diving platform, water slide, water flume, or water recreational play equipment that is built into or attached to the pool structure;
- (f) Is provided by, or used by a:

- (i) Youth camp;
  - (ii) College, university, or school;
  - (iii) Municipality;
  - (iv) Water park, amusement park, or water recreational attraction; or
  - (v) An apartment complex, housing subdivision, or mobile home park with more than ten units, except as provided in §B(45) of this regulation; or
  - (g) Is used more than 4 times a week for swimming lessons, water safety instruction, or swimming competition.
- (40) Repair.
- (a) "Repair" means substituting a component having the same make and model as the previously approved component for the previously approved component.
  - (b) "Repair" does not include:
    - (i) Replacements;
    - (ii) Alterations;
    - (iii) Installation of additional equipment; or
    - (iv) Substitutions involving a component which does not meet the requirements of this chapter.
- (41) Replacement.
- (a) "Replacement" means substituting a component, which has a different make or model but has the same operating characteristics and certifications as the previously approved component, for the previously approved component.
  - (b) "Replacement" does not include:
    - (i) Repairs;
    - (ii) Alterations;
    - (iii) Installation of additional equipment; or
    - (iv) Substitutions involving a component which does not meet the requirements of this chapter.
  - (c) "Replacement" includes the installation of any component which is being installed at an aquatic facility that received approval after construction from the Secretary before May 30, 2016, to bring an aquatic facility into compliance with new provisions of this chapter.
- (42) "Routine inspection" means an inspection that includes but is not limited to verifying compliance with:
- (a) Regulation .21 of this chapter;
  - (b) Regulation .25 of this chapter;
  - (c) Regulation .28 of this chapter;
  - (d) Regulation .29 of this chapter;
  - (e) Regulation .40 of this chapter;
  - (f) Regulation .44 of this chapter;
  - (g) Regulation .45 of this chapter;
  - (h) Regulation .46 of this chapter;
  - (i) Regulation .48 of this chapter; and
  - (j) Regulation .48-1 of this chapter.
- (43) "Safety vacuum release system" means a vacuum release system that:
- (a) Is capable of providing vacuum release at a suction outlet caused by a high vacuum occurrence due to a suction outlet flow blockage; and
  - (b) Complies with 15 U.S.C. §8003.
- (44) "Secretary" means the Secretary of Health and Mental Hygiene or the Secretary's designee, including a local health officer.
- (45) "Semipublic pool" and "semipublic spa" means a pool or spa at a facility that:
- (a) Has pool use or spa use restricted to an individual:
    - (i) Staying at the facility, where the facility is a temporary dwelling, including a hotel, motel, campground, bed and breakfast having nine or more guest rooms, or similar temporary dwelling;
    - (ii) Holding membership at the facility, where the facility is an adult health club, retirement community, marina, condominium, or similar facility;
    - (iii) Residing at an apartment complex, housing subdivision, or mobile home park with ten units or less;
    - (iv) Receiving treatment at a physical therapy center pool or spa, where the pool or spa is used for providing therapy; or
    - (v) Who is the owner or an owner of the pool or spa; and
  - (b) Has a pool or spa that is not:
    - (i) Open for admission to the general public, except as provided in §B(45) of this regulation;
    - (ii) Available to an individual upon the payment of a fee for the use of the pool and spa;
    - (iii) A limited public-use pool, a private pool, a private spa, a private spray ground, a recreational pool, or a spray ground;
    - (iv) Equipped with a swimming pool sliding board, diving platform, water slide, water flume, or water recreational play equipment that is built into or attached to the pool structure; and
    - (v) At a bed and breakfast that has eight or fewer guest rooms.
- (46) "Shallow" means 5 feet or less in depth.
- (47) Spa.
- (a) "Spa" means a pool, hot tub, or whirlpool that is:
    - (i) Primarily designed for relaxation or therapeutic use and not for swimming;
    - (ii) Not more than 4 feet in depth;
    - (iii) Equipped with built-in seats or benches; and
    - (iv) Usually equipped with hydrotherapy jets, heated water, an air injection system, or some combination of these features.
  - (b) "Spa" does not include a pool, hot tub, or whirlpool classified as a swim spa.
- (48) "Splash zone" means the maximum distance the water from a spray ground can project horizontally at designed flow rates.
- (49) Spray Ground.
- (a) "Spray ground" means an area for water play into which treated and filtered water is sprayed but not allowed to accumulate on the play surface.

- (b) "Spray ground" includes splash pads and interactive fountains.
- (c) "Spray ground" does not include decorative fountains where interaction with the water is prohibited.
- (50) "Stadium seating" means an area of high-occupancy seating provided above the pool level for observation.
- (51) "Supplemental disinfectant" means, other than chlorine or bromine, any disinfectant, sanitizer, or antimicrobial pesticide approved by the Environmental Protection Agency.
- (52) "Swimming pool slide" means a water-contact device less than 10 feet in height that an individual may use to enter a pool by sliding down an inclined plane.
- (53) "Swim spa" means a spa designed to create a current of water against which an individual may swim for exercise or therapy.
- (53-1) "TDSF" means total dissolved solids factor.
- (53-2) "TF" means temperature factor.
- (54) Theoretical Peak Occupancy.
  - (a) "Theoretical peak occupancy" means the anticipated peak number of bathers in an aquatic venue and the anticipated peak number of occupants on the decks of an aquatic facility.
  - (b) "Theoretical peak occupancy" is calculated by dividing the surface area in square feet of the aquatic venue by the density factor (D) in Regulation .19B of this chapter, that fits the specific aquatic venue being considered.
- (55) "Therapy pool" means a pool that is exclusively used in the physical treatment of a disease, injury, or disorder.
- (56) "Total dynamic head" means the hydraulic calculation of the resistance to flow in a circulation system based on the Hazen-Williams formula in Regulation .25C of this chapter.
- (57) "Tube ride" means a pool designed to move an individual on a tube, raft, or other floating support along a channel filled with water.
- (58) "Turnover rate" means the time required to circulate a quantity of water equal to the pool or spa volume or for a spray ground, the surge tank volume.
- (59) "Unblockable drain" means a suction outlet such that:
  - (a) Its perforated area cannot be shadowed by the area of the 18 inch by 23 inch body blocking element of the American National Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs (ANSI/APSP-16 2011); and
  - (b) The rated flow through the remaining open area cannot create a suction force in excess of the removal force values in Table 1 of American National Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs (ANSI/APSP-16 2011).
- (60) "User load" means the maximum number of individuals, as determined by the Secretary, for sanitary purposes, allowed:
  - (a) In a pool or spa based on the water surface area and water depths; or
  - (b) To use a spray ground based on the splash zone area.
- (61) "Wading pool" means a pool with a water depth of 24 inches or less that is intended for use by children.
- (62) "Warm water" means an aquatic venue with a water temperature over 90°F (32°C).
- (63) Water recreational attraction.
  - (a) "Water recreational attraction" means special water circulation and operational features or unconventional design and operational features which provide patrons recreational activity different from that associated with a conventional swimming pool.
  - (b) "Water recreational attraction" includes but is not limited to a:
    - (i) Piece of water play equipment;
    - (ii) Lazy river;
    - (iii) Tube ride;
    - (iv) Water slide; and
    - (v) Wave pool.
  - (c) "Water recreational attraction" does not include a spray ground, a floating or temporarily attached volleyball net, or a floating or temporarily attached basketball hoop.
- (64) "Water slide" means a water-contact amusement ride when the height of the slide is 10 feet or more.
- (65) "Wave pool" means a pool designed with mechanical or hydraulic apparatus to generate waves in the pool.
- (66) "WRI" means water replacement interval.

**.05 Previously Constructed Aquatic Facilities and Venues.**

**A. The owner of an aquatic facility or venue that was constructed before February 10, 1997:**

- (1) Except as provided in §A(2)(b) and (4) of this regulation, is exempt from bringing an aquatic facility and venue into compliance with Regulations .13C, .14A(3), .16G(1), .16G(2)(a)—(b), .17C, .18A(3), .22, .22-1, .23B(3)—(4), .24A, .25B, .26H(1)(a), .33, .34C, and .35 of this chapter;
- (2) Shall:
  - (a) Except as required by §A(2)(b)—(c) of this regulation, maintain an aquatic facility and venue as originally constructed;
  - (b) Ensure that a condition that jeopardizes the health or safety of the public is corrected to meet the requirements of this chapter;
  - (c) Maintain the minimum turnover rate for the aquatic venue in compliance with §C of this regulation;
  - (d) By January 1, 2017, bring an aquatic facility and venue into compliance with Regulations .14C(2), .19C(3), .21D, .24, .26I, .40F(10), and .55 of this chapter; and
  - (e) By January 1, 2018, bring an aquatic facility and venue into compliance with Regulations .23B(5) and (7), .26D, F(4), G(2)—(12), .29B(1)—(2), .40B(2), and .42 of this chapter;
- (3) May complete a repair according to Regulation .06-2 that restores an aquatic facility and venue to its original condition before damage or deterioration without the component complying with the requirements of this chapter;
- (4) Who intends to alter an aquatic facility or venue shall ensure that the alteration complies with the requirements of this chapter; and
- (5) Shall ensure that, notwithstanding any exemption set forth at §A(1) of this regulation, the diving area dimensions shall comply with Regulation .27B of this chapter.

**B. The owner of an aquatic facility or venue that received approval after construction from the Secretary between February 10, 1997 and May 30, 2016:**

- (1) Except as provided in §B(2)(b) and (3) of this regulation, is exempt from bringing an aquatic facility and venue into compliance with Regulations .16G(1) and (2)(a)—(b), .18-1B—C, .22A(2)(b), .22-1, .22-2, .23B(3)—(4), .25B and D(4), .26H(1)(a), .33, and .35A(2)(a) of this chapter;

(2) Shall:

(a) Maintain an aquatic facility and venue as originally constructed with regards to the exemptions as set forth in §B(1) of this regulation;

(b) Ensure that a condition that jeopardizes the health or safety of the public is corrected to meet the requirements of this chapter;

(c) Maintain the minimum turnover rate for the aquatic venue in compliance with §C of this regulation;

(d) By January 1, 2017, bring an aquatic facility and venue into compliance with Regulations .14C(2)(a)—(b), .19C(3), .21D, .24 .26I, .34C, .40F(10), and .55 of this chapter; and

(e) By January 1, 2018, bring an aquatic facility and venue into compliance with Regulations .23B(5) and (7), .26D, F(4),G(2)—(12), .29B(1)—(2), .40B(2), and .42 of this chapter; and

(3) Who intends to alter an aquatic facility or venue shall ensure that the alteration complies with the requirements of this chapter.

C. The owner of an aquatic facility or venue that was constructed before February 10, 1997 or that received construction approval from the Secretary between February 10, 1997 and May 30, 2016 shall maintain the following minimum turnover rates based on the aquatic venue type:

Type of Aquatic Venue	Minimum Turnover Time (t)
Any Aquatic Venue Not Specifically Listed	480 minutes
Limited Public-Use Pool	720 minutes
Spa	30 minutes
Spray Ground	120 minutes
Therapy Pool	360 minutes
Wading Pool	120 minutes
Water Recreational Attraction	360 minutes

D. Except as provided in §A(2)(b) and (4) of this regulation, the owner of a spa or wading pool that was constructed or that received construction approval from the Secretary before May 30, 2016, and is equipped with a single skimmer with a disabled equalizer line, is exempt from bringing the spa or wading pool into compliance with Regulation .26H of this chapter.

#### **.06 Construction[, Alteration, and Replacement Permits for Recreational Pools, Semipublic Pools, and Public Spas] and Alteration Permits.**

A. An owner who intends to construct or alter [a recreational pool, semipublic pool, or public spa or replace a public pool or spa component shall obtain a construction, alteration, or replacement permit from the Secretary before beginning construction, alteration, or replacement work] *an aquatic facility or venue shall obtain a construction or alteration permit from the Secretary before beginning construction or alteration.*

B. An owner may not construct or alter [a recreational pool, semipublic pool, or public spa or replace a public pool or spa component] *an aquatic facility or venue* without a construction[,] or alteration[, or replacement] permit.

C. To obtain a construction[, or alteration[, or replacement] permit, an owner shall submit to the Secretary:

(1) An application for a construction[, or alteration[, or replacement] permit on an application form provided by the Secretary that includes:

(a) The full names and addresses of the owner and authorized agents of the owner who may act on the owner's behalf during the construction or alteration of [the pool or spa, or the replacement of the public pool or spa component] *an aquatic facility or venue*;

(b) A statement saying "I hereby acknowledge that all items either listed or shown in these plans and specifications as not in contract, by others, or equivalent, are my responsibility. I also realize that this entire project must be completed in accordance with the approved plans and specifications and all conditions listed in the construction[, or alteration[, or replacement] permit and meet the requirements of this chapter before the issuance of an operating permit by the Secretary"; and

(c) The owner's signature, which:

(i) (text unchanged)

(ii) Is in agreement with the statement set forth in [§C(1)(b)] §C of this regulation; [and]

(2) Plans and specifications for the construction[, or alteration[, or replacement] which:

(a) Are prepared by a licensed or certified professional engineer, architect, draftsman, or a person with extensive experience in the design of [pools and spas] *aquatic facilities and venues*;

(b) Are drawn to scale, in a professional and accurate manner, with sufficient clarity and detailed dimensions to show the nature and character of the work to be performed; [and]

(c) Include specific information on the quality or performance of the material or equipment when necessary to establish conformance with this chapter[.]; and

(d) Are supplied in triplicate; and

(3) The application review fee required by COMAR 10.01.17.02.

D. Except [for an alteration or replacement] *as provided in §E of this regulation*, an owner shall ensure that the plans and specifications required [in] by §C of this regulation include the following:

(1)—(2) (text unchanged)

(3) [Pool or spa] *Aquatic venue* layout plan, sectional views, and appurtenant equipment;

(4) [Pool or spa] *Aquatic venue* piping layout plan;

(5)—(18) (text unchanged)

E. An owner shall ensure that, for an alteration [or, replacement,] *or partial construction*, the plans and specifications required [in] by §C of this regulation include the information that pertains to the alteration [or, replacement] *or partial construction*.

F. An owner shall obtain necessary local zoning approval and building, electrical, plumbing, and other applicable local permits before beginning construction [or alteration of a recreational pool, semipublic pool, or public spa or replacement of a public pool or spa component], *partial construction, or alteration work*.

[G. Before issuing a construction, alteration, or replacement permit, the Secretary may require changes in the design of the facilities if the design does not meet the criteria set forth in this chapter.

H. Upon an owner's compliance with the provisions of this chapter, the Secretary shall approve the plans and specifications and issue a construction, alteration, or replacement permit, which is valid for the start of the construction, alteration, or replacement for 1 year from the date of issue and for 1 additional year from the date construction, alteration, or replacement begins.]

[I.] G. The local health department may not approve a local building permit for [recreational pool, semipublic pool, or public spa] or that includes construction, partial construction, or alteration [, or replacement] of an aquatic facility or venue until the plans and specifications for [pool or spa] construction, partial construction, or alteration[, or the replacement of a public pool or spa component] of an aquatic facility or venue have been approved by the Secretary.

[J.] H. The Secretary shall review the plans and application [and shall approve or deny issuance of] for a construction, partial construction, or alteration[, or replacement] permit within 30 business days of receipt of the application.

[K.] I. If plans are submitted that are [not]:

(1) Not in compliance with the requirements of this chapter, the Secretary shall [disapprove the plans and deny the issuance of a construction, alteration or replacement permit.]:

(a) Notify the owner of the deficiencies in the application;

(b) Deny the application if additional information to correct the deficiencies in the application are not received during the resubmittal window; or

(c) Allow the owner a resubmittal window of 30 calendar days to submit information to correct the deficiencies before denying the application according to §I of this regulation; and

(2) In compliance with the requirements of this chapter, the Secretary shall approve the plans and issue a construction, partial construction, or alteration permit, which is valid for the start of the construction, partial construction, or alteration for 1 year from the date of issue and for 1 additional year from the date construction, partial construction, or alteration begins.

J. If the Secretary denies the issuance of a construction, partial construction, or alteration permit, an owner may reapply for a new construction, partial construction, or alteration permit according to §C of this regulation and pay the applicable fees.

[L.] K. An owner may not deviate from the approved plans and specifications for construction, partial construction, or alteration[, or replacement at a recreational pool, semipublic pool, or public spa] of an aquatic facility or venue unless [revised] the :

(1) Revised plans are submitted [to and approved in writing by the Secretary] through the application review process in §C of this regulation;

(2) Owner pays the applicable fees; and

(3) Secretary issues a construction, partial construction, or alteration permit for the revised work.

[M.] L. If [a recreational pool, semipublic pool, or public spa] an aquatic facility or venue is not being constructed, partially constructed, or altered [or components are not being replaced] in accordance with the approved plans, the Secretary may revoke the construction, partial construction, or alteration[, or replacement] permit for the construction, alteration, or replacement] permit and the owner shall immediately [shall] cease construction, partial construction, or alteration[, or replacement].

[N.] M. If the Secretary denies the issuance of a construction, partial construction, or alteration[, or replacement] permit as set forth in [§K] §I of this regulation, or revokes a construction, partial construction, or alteration[, or replacement] permit as set forth in [§M] §L of this regulation, the Secretary shall notify the owner in writing:

(1)—(2) (text unchanged)

(3) That to preserve the right to a hearing, the owner shall contact the Department within [30] 10 calendar days of the receipt of the notice of denial or revocation.

[O.] N. An owner shall ensure that a construction, partial construction, or alteration[, or replacement] permit is posted in a conspicuous location at the site of construction, partial construction, or alteration[, or replacement].

[P. An owner may make a repair to a previously approved structure, component, or piece of equipment in accordance with this chapter without:

(1) Obtaining a construction, alteration or replacement permit from the Secretary; or

(2) Notifying the Secretary.]

#### **.06-1 Replacements.**

A. An owner may replace a component at an aquatic facility or venue before obtaining approval from the Secretary.

B. An owner shall obtain necessary local zoning approval and building, electrical, plumbing, and other applicable local permits before replacing a component at an aquatic facility or venue.

C. The local health department may approve a local building permit for or that includes replacement of a component at an aquatic facility or venue before the replacement application is approved by the Secretary.

D. An owner shall submit, on a form provided by the Secretary, an application for the replacement of a component at an aquatic facility or venue within 10 calendar days of completing the replacement.

E. The Secretary shall inspect the replacement of a component at an aquatic facility or venue within 30 business days of receipt of the application.

F. If, during the inspection, the replacement of a component at an aquatic facility or venue is:

(1) In compliance with the requirements of this chapter, the Secretary shall;

(a) Provide the owner a copy of the inspection report; and

(b) Issue an approval letter; or

(2) Not in compliance with the requirements of this chapter, the Secretary shall:

(a) Deny the replacement application; and

(b) Notify the owner:

(i) Of the reason or reasons for the denial;

(ii) That the owner may request from the Secretary an opportunity for a hearing on the denial pursuant to State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland, if the owner wishes to contest the denial;

(iii) That to preserve the right to a hearing, the owner shall contact the Department within 10 calendar days of the receipt of the notice of denial; and

(iv) That the owner shall cease operation of an aquatic facility or venue if the component is essential to operation or cease operation of the replaced component where the replacement of a component was found to violate this chapter until the violation is corrected, a new replacement application and applicable fee is submitted to the Secretary, and the Secretary inspects and approves the replacement of the component.

#### **.06-2 Repairs.**

An owner may make a repair to an aquatic facility or venue in accordance with this chapter without:  
A. Obtaining a construction, partial construction, alteration, or replacement permit from the Secretary; or  
B. Notifying the Secretary.

**.07 [Permit for Construction of Part of a Recreational Pool, Semipublic Pool, or Public Spa.] Partial Construction Permits.**

A. An owner may request a *partial construction* permit for [construction of part of a recreational pool, semipublic pool, or public spa] *an aquatic facility or venue* by submitting to the Secretary[:

(1) A detailed written explanation of why construction plans for the entire pool or spa cannot be submitted; and

(2) Plans] *plans*, information, and statements as required [in] by Regulation .06 of this chapter that pertain to the construction of part of [a recreational pool, semipublic pool, or public spa] *an aquatic facility or venue*[.];

(3) A site plan;

(4) Information regarding the proposed water supply and waste disposal system; and

(5) A signed statement indicating that the permit holder for construction of part of a recreational pool, semipublic pool, or public spa will be proceeding at the owner's risk without the assurance that a permit for the construction of the rest of the pool or spa will be granted.

B. Upon an owner's compliance with the provisions of this chapter and local codes, the Secretary shall approve the plans and issue a permit for construction of part of a recreational pool, semipublic pool, or public spa.

C. If a person submits plans for the construction of part of a recreational pool, semipublic pool, or public spa that are not in compliance with the provisions of this chapter, or if a local code prohibits the issuance of a permit for partial construction, the Secretary shall disapprove the plans and deny a permit for the construction in accordance with Regulation .06 of this chapter.

D.] B. A person may not operate [a recreational pool, semipublic pool, or public spa] *an aquatic facility or venue* until the entire project has been constructed and approved in accordance with Regulations [.06----.09] .06—.09 of this chapter.

**.08 Approval After Construction, Partial Construction, or Alteration[, or Replacement].**

[A. After construction, alteration, or replacement of a component at a recreational pool, semipublic pool, or public spa is completed, the owner shall contact the Secretary for approval of the pool or spa within 30 days.]

[B.] A. A person may not operate or permit the use of [a recreational pool, semipublic pool, or public spa] *an aquatic facility or venue* that has not received written approval from the Secretary after its [alteration or construction] *construction, partial construction, or alteration*.

[C. A person may operate or permit the use of a recreational pool, semipublic pool, or public spa for 30 days after completing the replacement of a public pool or spa component without receiving a final inspection and written approval from the Secretary.]

[D.] B. The Secretary shall conduct an inspection [or inspections] to ensure that [a recreational pool, semipublic pool, or public spa] *an aquatic facility or venue* is constructed or altered[, or that a public pool or spa component is replaced] according to the approved plans and meets the requirements of this chapter, and shall:

(1) Grant written approval for [the pool or spa] *an aquatic facility or venue* if it was constructed, *partially constructed*, or altered[, or a public pool or spa component was replaced] according to the approved plans, *meets the requirements of this chapter*, and the owner has received local approval for any building, electrical, plumbing, or other work that requires a local permit; or

(2) Deny approval for [the pool or spa] *an aquatic facility or venue* if it was not constructed, *partially constructed*, or altered[, or a public pool or spa component was not replaced] according to the approved plans, *does not meet the requirements of this chapter*, or the owner has not received local approval for any building, electrical, plumbing, or other work that requires a local permit.

[E.] C. The Secretary shall grant approval or deny approval of the completed construction, *partial construction, or alteration*[, or replacement of a public pool or spa component within 30 days of receipt of notice of completion from the owner] *of an aquatic facility or venue within 15 business days of inspecting*.

[F.] D. If minor items that do not affect the health or safety of the public need to be corrected, the Secretary may issue a partial approval for [the pool or spa] *an aquatic facility or venue* after construction[, alteration, or replacement of a public pool or spa component] pending full compliance according to the following conditions:

(1) The owner shall fully comply with this chapter by the end of the 30 *calendar* day period in order to obtain written approval of [the recreational pool, semipublic pool, or public spa] *an aquatic facility or venue*; and

(2) If at the end of the 30 *calendar* day period, the Secretary is unable to approve [the recreational pool, semipublic pool, or public spa] *an aquatic facility or venue* pursuant to [§C] §B of this regulation, the Secretary shall [disapprove the construction, or alteration] *disapprove the construction of an aquatic facility or venue*.

[G.] E. If the Secretary does not grant approval for [the pool or spa] *an aquatic facility or venue* after it is constructed, *partially constructed* or altered[, or a public pool or spa component is replaced,] the Secretary shall notify the owner in writing:

(1) (text unchanged)

(2) That the person may request, from the Secretary, an opportunity for a hearing on the disapproval pursuant to State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland[, if the person wishes to contest the disapproval]; [and]

(3) That to preserve the right to a hearing, the person shall [contact] *submit a written request for a hearing* to the Secretary within [30] *10 calendar* days of the receipt of the notice of disapproval[.]; and

(4) *That the person may submit a new plan review application and pay any applicable fees according to Regulation .06 of this chapter.*

**.09 Permits for Operation.**

A. A person may not operate [a public pool or spa] *an aquatic venue* without an annual operating permit, issued by the Secretary, except that in the case of [a pool or spa] *an aquatic venue* that has received a partial approval of construction [or alteration] pursuant to Regulation [.08E] .08D of this chapter, the Secretary may issue a [nontransferable] *nontransferable* 30 *calendar* day permit for the temporary operation of the [pool or spa] *aquatic venue*.

B. On an application form provided by the Secretary, [a person] *an owner* shall apply to the Secretary for [a] *an annual* permit to operate [a public pool or spa at least 30 days before the pool or spa is scheduled to open for use for the first time and 30 days before a previous permit expires.] *an aquatic venue for, whichever day is later:*

(1) *At least 30 calendar days before the aquatic venue is scheduled to open for the first time; or*

(2) *Thirty calendar days before the previous permit expires.*

C. The Secretary shall:

(1) Issue, *for each aquatic venue*, a nontransferable permit to an owner whose [public pool or spa] *aquatic venue* is in compliance with this chapter *as verified by a full compliance inspection completed within the 12 months before the application for a permit to operate*; and

(2) When [a public pool or spa] *an aquatic venue* does not meet the requirements of this chapter, deny the permit within 30 *business days* by notifying the owner in writing:

(a) Of the reason or reasons for the denial[.];

(b) Of the action to be taken in order for the [pool or spa] *aquatic venue* to qualify for a permit[.];

(c) That the owner may request from the Secretary an opportunity for a hearing on this denial pursuant to State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland[.]; and

(d) That to preserve the right to a hearing, the person shall contact the Secretary within [30] *10 calendar days* of the receipt of the notice of denial.

D. A person who operates [a public pool or spa] *an aquatic venue* shall post the operating permit in a conspicuous place [at the pool or spa site] *near the entrance to the aquatic venue*.

#### **.10 Suspension or Revocation of an Operating Permit.**

##### A. Suspension.

(1) The Secretary may:

(a) (text unchanged)

(b) Summarily suspend an operating permit and close [a public pool or spa] *an aquatic venue* when protection of the public health, safety, or welfare imperatively requires emergency action.

(2) The Secretary may summarily suspend an operating permit pursuant to §A(1) of this regulation for any [of the following:

(a) Residual disinfection levels in violation of Regulation .44 of this chapter;

(b) Sanitary water quality in violation of Regulation .48 of this chapter;

(c) Water pH in violation of Regulation .45A(1) of this chapter;

(d) Water clarity in violation of Regulation .45A(7) of this chapter;

(e) A malfunctioning or nonworking recirculation or disinfection system;

(f) A condition that may endanger the health and safety of an individual using a pool or spa, for example, a missing drain cover or other suction outlet entrapment hazard; and

(g) A lifeguard has not been provided as required in Regulation .40 of this chapter] *critical violation as defined in Regulation .04B of this chapter*.

(3) *The Secretary may reinstate an operating permit to an owner whose operating permit was suspended when the owner:*

(a) *Corrects the violation;*

(b) *Pays any applicable fees; and*

(c) *Complies with all applicable provisions of this chapter.*

##### B. Revocation and Permitting After Revocation.

(1) The Secretary may revoke a permit [upon a repeated violation] *for:*

(a) *Consecutive repeat violations of a requirement of this chapter[.]; or*

(b) *An owner whose operating permit was revoked within the past 2 years, upon determination that the owner is in violation of the same requirement of this chapter that resulted in the previous revocation; and*

(2) *The Secretary may issue an operating permit to an owner whose operating permit was revoked:*

(a) *After the 6 month waiting period from the date of revocation has expired; and*

(b) *When the owner:*

(i) *Corrects the violations;*

(ii) *Applies for an operating permit;*

(iii) *Pays any applicable fees; and*

(iv) *Complies with all applicable provisions of this chapter.*

##### C. Hearing.

(1)—(2) (text unchanged)

(3) To preserve a right to a hearing, a person shall contact the Secretary within [30] *10 calendar days* of the receipt of the notice.

#### **.11 Inspections and Right of Entry.**

A. The Secretary may enter, at a reasonable time, public or private property for *the purpose of* inspecting and investigating conditions relative to the enforcement of this chapter.

B. (text unchanged)

C. *The Secretary shall conduct:*

(1) *A full compliance inspection of the aquatic venue relative to the enforcement of this chapter at least once every 12 months;*

(2) *Except as provided in §C(4) of this regulation, a full compliance or routine inspection of the aquatic venue relative to the enforcement of this chapter at least once every 90 business days;*

(3) *For an aquatic venue that had a critical violation of this chapter on the previous inspection, a full compliance or routine inspection of the aquatic venue relative to the enforcement of this chapter at least once every 30 business days until the aquatic venue has no critical violations of this chapter; and*

(4) *For an aquatic venue that had no critical violations on the three previous consecutive inspections, a full compliance inspection of the aquatic venue relative to the enforcement of this chapter at least once every 12 months.*

#### **.12 Conflict of Regulations.**

An owner shall comply with:

A. The provision that establishes a [higher] *more stringent* standard for the promotion and protection of public health and safety if a provision of this chapter is in conflict with a local code, ordinance, statute, or other regulation; and

B. (text unchanged)

#### **.13 Standards for Recreational and Semipublic Pools.**

An owner shall ensure that [an existing, newly built, or altered] a recreational or semipublic pool is in compliance with:  
A.—C. (text unchanged)

**.14 Standards for Public Spas.**

A. An owner shall ensure that [an existing, newly built, or altered] a public spa is in compliance with:

(1)—(3) (text unchanged)

B. (text unchanged)

C. An owner shall ensure that a spa hydrojet circulation system:

(1) (text unchanged)

(2) Has a shut-off switch *located*:

(a) *Within sight of the spa; and*

(b) *At least 5 feet horizontally from the inside walls of the spa.*

**.15 Standards for Limited Public-Use Pools.**

A. An owner of a limited public-use pool shall ensure that:

(1) (text unchanged)

(2) The barrier around the pool is in compliance with:

(a) [Appendix E of the] *The American National Standard for Residential Inground Swimming Pools (ANSI/APSP/ICC-5 2011)*, if the pool is used by a family day care home; or

(b) (text unchanged)

(3) The pool and the operation of the pool are in compliance with Regulations [.01—.05] .01—.06-2, .09—.12, .15, .19—.20, .24, [.25B(3)].25B(1), .28, .31, .34, .37—.41, and .43—[.54].55 of this chapter;

(4) (text unchanged)

(5) The dimensions of a diving area are:

(a) In conformance with Regulation [.27B] .27A of this chapter; or

(b) If the diving area does not conform to Regulation [.27B] .27A, the diving equipment is restricted from use by temporary barriers or is removed;

[(6) A suction outlet is in compliance with Regulation .28 of this chapter to prevent suction entrapment;]

[(7) (6) The following safety equipment is immediately available:

(a) A first aid kit [as recommended by the American Red Cross;

(b) A mouth piece for CPR;

(c) Disposable latex plastic gloves;

(d) *that complies with Regulation .40A of this chapter;*

(b) *A blood borne pathogen control kit the complies with Regulation .40A of this chapter;*

(c) A light, strong rescue pole [with a rescue hook designed for lifesaving] *that complies with Regulation .40A of this chapter;*

[(e)] (d) (text unchanged)

[(f)] (e) A telephone for reaching 911 emergency service [and the telephone location posted with the:

(i) Name and phone number of the nearest available police, fire, and ambulance or rescue unit,

(ii) Name of the facility or the name of the owner of the property where the pool is located, and

(iii) Location of the pool] *that complies with Regulation .40B of this chapter;*

[(8) (7) An individual certified in [cardiopulmonary resuscitation (CPR)] *CPR* for the professional rescuer and certified in first aid is on duty while the pool is in use;

[(9) (8) Pool chemicals are used and stored in accordance with manufacturers' directions and the [material] safety data sheet for [a] *the* particular chemical; and

[(10) (9) The pool has backflow protection:

(a) For a potable water supply, in conformance with COMAR 09.20.01[.]; and

(b) (text unchanged)

B. An owner of a family day care home using a limited public-use pool shall ensure that water safety supervision is provided in compliance with COMAR [07.04.01.22] *13A.15.08.04*.

C. An organized group, agency, or other person using a limited public-use pool for swimming lessons or water safety training shall ensure that water safety supervision is provided as follows:

(1) (text unchanged)

(2) Aquatic rescue staff [are] *is* on site as follows:

(a) An individual certified in American Red Cross Basic Water Rescue, or with equivalent certification as approved by the Secretary, for each ten bathers, or fraction of ten bathers, if the pool:

(i) Is no more than 3 1/2 feet in depth at the shallow end of the swimming area[.];

(ii) Is no more than 5 feet in depth at the deepest point[.];

(iii) Has a rescue pole that can be practically used to reach beyond the midpoint of the pool and can be used within the pool enclosure without an obstruction, such as a wall or tall fencing, that restricts the use of the pole[.]; and

(iv) (text unchanged)

(b) An individual certified in American Red Cross Lifeguarding, or with an equivalent certification as approved by the Secretary, for each 25 bathers, or fraction of 25 bathers, if the pool:

(i) Is more than 3 1/2 feet in depth at the shallow end of the swimming area[.];

(ii) Has an area more than 5 feet in depth at the deepest point[.];

(iii) Does not have a rescue pole that can be practically used to reach beyond the midpoint of the pool, or an obstruction, such as a wall or tall fencing, exists within the pool enclosure that restricts the use of the pole[.]; or

(iv) (text unchanged)

D. (text unchanged)

**.16 Standards for Water Recreational Attractions.**

An owner shall ensure that:

A. (text unchanged)

B. Plans for supervision, attendants, and lifeguards are submitted as part of the construction *or alteration* plans and include safety personnel at all potentially hazardous activity areas;

C. A swimming pool slide is in conformance with the American National Standard for Public Swimming Pools and has:

(1)—(3) (text unchanged)

(4) A centerline distance [from]:

(a) *From* the end of a slide to a wall, lifeline, transition point, centerline from another slide, or obstruction that eliminates the potential for an individual using the slide to strike a wall, lifeline, transition point, an individual using another slide, or an obstruction; *or*

(b) *In conformance with the manufacturer's installation instructions;*

(5) A minimum side distance [of]:

(a) *Of* 4 feet from the centerline of a slide to a wall, lifeline, transition point, or obstruction; *or*

(b) *In conformance with the manufacturer's installation instructions;*

(6)—(8) (text unchanged)

D. A water slide:

(1) Complies with the conditions set forth [at] *in* COMAR 09.12.63 as evidenced by written documentation from:

(a)—(b) (text unchanged)

(2) Exits to a [plunge] *splash* pool or slide runout *as defined in* COMAR 09.12.63.02 *or a plunge pool;*

E.—F. (text unchanged)

[G. A spray pool has:

(1) A bottom that slopes from 1/4 inch per foot to 5/8 inch per foot to a drain with grate;

(2) No standing water; and

(3) No obstruction less than 4 feet in height;]

G. A lazy river:

(1) *Does not have:*

(a) *Handrails, steps, stairs, or propulsion jets that protrude into the river; or*

(b) *Obstructions around the perimeter of the lazy river, such as bridges or landscaping, that impact lifeguarding, sight lines, or rescue operations;*

(2) *Has:*

(a) *A means of access and egress provided at 150 foot intervals around the lazy river;*

(b) *A handhold, meeting the requirements of Regulation .22-1 of this chapter, on at least one side of the lazy river for the entire perimeter of the river; and*

(c) *Inlets which are:*

(i) *Equipped with directional fittings;*

(ii) *Positioned behind a grate with a maximum mesh size of 1½ inches; or*

(iii) *Plumbed to pumps connected to the same power source so that no one pump can be operated independently from the rest to ensure that all inlets have continuous flow through them while the lazy river is in operation;*

(3) *That incorporates a bridge which spans the river shall install the bridge so that the minimum clearance from any structure overhead to the:*

(a) *Bottom of the lazy river is 7 feet; and*

(b) *Static water surface is 4 feet; and*

(4) *Using inlets complying with §G(2) of this regulation is allowed to operate if a pump that provides current to a lazy river is not running.*

[H. A single-lane pool used for swimming laps has:

(1) A minimum width of 7 1/2 feet; and

(2) A sign on the deck that reads, "Warning: No Diving—Shallow Water" if the water depth is 5 feet or less;]

[I.] H. A decorative fountain or waterfall [installed in or] connected to a pool or spa *circulation system* does not create a health or safety hazard;

[J.] I. A spray fixture, fountain, piece of play equipment, bridge, ramp, stair, float, swing, or other recreational equipment located within a pool or spa:

(1)—(5) (text unchanged)

(6) Is provided with recirculated, treated [pool] water for a spray, stream, or other flow of water; and

(7) (text unchanged)

[K.] J. (text unchanged)

[L. At least two interconnected main drains are installed in the deepest part of a pool and] K. *One or more suction outlet covers, meeting the requirements of Regulation .28 of this chapter,* are connected to the filtration system;

[M.] L. A pump reservoir or surge tank is provided for a *swimming pool slide* [or], water feature, *or water slide* circulation pump intake and:

(1)—(6) (text unchanged)

[N.] M. A *swimming pool slide, water slide* or water feature circulation pump has a check valve on the discharge side; and

[O. Returns] N. A *return* from a filtration system [are] *is* placed to provide even and positive circulation and to eliminate any dead spots.

### **.17 Standards for Public Wading Pools.**

An owner shall ensure that a public wading pool is in compliance with:

A. (text unchanged)

B. Applicable State and local codes; *and*

C. The American National Standard for Public Swimming Pools[; and

D. Article 10.6 of the American National Standard for Public Spas].

### **.18 Standards for Public Therapy Pools.**

An owner shall ensure that a public therapy pool:

A. Is in compliance with:

(1)—(3) (text unchanged)

B. Has:

(1) (text unchanged)

(2) A transition area between a shallow and a deep area that has:

(a) A floor slope that does not exceed 1 foot of drop to 3 feet of run; [or]

(b) Steps [or ramps];

(c) A ramp with handrails [or a];

(d) A swing lift to transfer bathers from a shallow area to a deep area; [and] or

(e) A floor slope that exceeds 1 foot of drop to 3 feet of run that is equipped with a protective barrier; and

C. (text unchanged)

#### **.18-1 Standards for Spray Grounds.**

An owner shall ensure that a spray ground:

A. Is in compliance with:

(1) This chapter; and

(2) Applicable State and local codes;

B. Except when it is within a barrier, is equipped with a mechanism for controlling the operation of a spray ground, which can be locked to prevent unauthorized use of the spray ground; and

C. Has a pump reservoir or surge tank provided for a spray ground circulation pump intake and:

(1) Is made of concrete or other impervious material with a smooth slip-resistant finish;

(2) Has inlets through a weir or a gravity-fed drain with a secure grate;

(3) Has a minimum volume equal to 2 minutes of the combined flow of all pumps connected to the reservoir or tank;

(4) Is accessible only to authorized individuals;

(5) Has pump intakes located in the pump reservoir that are designed to allow cleaning without danger of entrapment; and

(6) The water velocity through grate or drain openings does not exceed 2 feet per second.

#### **.19 User Load and Theoretical Peak Occupancy.**

A. The Secretary shall determine the user load, as defined in Regulation [.05B(32)] .04 of this chapter, for each aquatic venue based on the following criteria:

(1) For a pool [and its deck], one individual is allowed for:

(a) Every 12 square feet of water surface in shallow areas[.];

(b) Every 15 square feet of water surface in areas exceeding 5 feet of water depth, excluding a diving area[.]; and

(c) (text unchanged)

(2) For a spa, one individual is allowed for every 9 square feet of water surface; [and]

(3) For a therapy pool, one individual is allowed for every:

(a) Therapy station[.]; or

(b) 20 square feet of water surface, whichever is less[.]; and

(4) For a spray ground, one individual is allowed for every 10 square feet of splash zone.

B. The Secretary shall determine the theoretical peak occupancy, as defined in Regulation .04 of this chapter, for an aquatic facility based on the density factors (D) for:

(1) Flat water: 20 square feet per individual;

(2) Agitated water: 15 square feet per individual;

(3) Warm water: 10 square feet per individual;

(4) Waterslide landing pool: the manufacturer-established capacity at any given time;

(5) Spray ground: 10 square feet per individual;

(6) Deck: 50 square feet per individual; and

(7) Stadium seating: 6.6 square feet per individual.

[B.]C. An owner shall ensure that the:

(1) Number of individuals [in a pool or spa and on the required deck area] using an aquatic venue does not exceed the user load as set forth in §A of this regulation;

(2) Number of individuals [using an enclosed pool or spa area or a spectator area] using an aquatic facility is in conformance with the theoretical peak occupancy as set forth in §B of this regulation and local fire code requirements; and

(3) User load [of a pool or spa is posted in a conspicuous place at the pool or spa] for each aquatic venue is posted at the entrance to each aquatic facility or venue.

#### **.20 [Public Pool or Spa Site] Aquatic Venue Site.**

An owner shall ensure that [a public pool or spa] an aquatic venue site:

A. Drains away from the [pool or spa] aquatic venue area;

B. Has water and waste water facilities that conform to the requirements of:

(1) COMAR 09.20.01[.];

(2) COMAR [26.04.01-----26.04.04.] 26.04.01—26.04.04; and

(3) (text unchanged)

C. Has a walkway between [a pool or spa] an aquatic venue and appurtenant buildings such as a bathhouse or equipment room; and

D. (text unchanged)

#### **.21 Barriers.**

A. Except as set forth in [§§B, C, and D] §§B—E of this regulation, an owner shall ensure that [a recreational pool, semipublic pool, or public spa.] an aquatic venue, including the required deck area, is completely surrounded by a barrier that complies with the following requirements:

(1) The top of the barrier is at least 72 inches above grade measured on the side of the barrier that faces away from the [pool or spa] aquatic venue;

(2) The maximum vertical clearance between grade and the bottom of the barrier is 4 inches measured on the side of the barrier that faces away from the [pool or spa] aquatic venue;

(3)—(9) (text unchanged)

(10) The barrier main access gate:

(a) Is located toward the shallow end of [a pool] of the aquatic venue;

(b) Has a latch release located at least 54 inches from grade level;

(c) Is [lockable] locked when the aquatic venue is not open for use;

(d) Is hung to open away from the [pool or spa] aquatic venue; and

(e) Has a minimum width of 4 feet; and

(f) Complies with Regulation .37 of this chapter; and]

(11) Doors and windows that open into the [pool or spa] aquatic venue area enclosed by the barrier have locks or latches to prevent unauthorized entry.

B. (text unchanged)

C. Except as provided in §D of this regulation, an owner may surround [a pool and spa, multiple pools, or multiple spas] an aquatic venue or multiple aquatic venues at one facility with one barrier instead of separate barriers for each [pool or spa] aquatic venue.

D. [An] Except as provided by §§E—G of this regulation, an owner shall ensure that a wading pool or a spray ground [or infant pool is] are separated from [a pool or spa] all other bodies of water by a barrier that has:

(1)—(2) (text unchanged)

(3) No opening that allows the passage of a sphere 4 inches in diameter; [and

(4) An entrance gate with a latch.]

(4) Has an entrance gate that is self-closing and self-latching that is hung to open toward the wading pool or spray ground; and

(5) Except as provided in §A(10) of this regulation, complies with the requirements in §A(2)—(11) of this regulation.

E. An owner of a spray ground that is not part of an aquatic facility with a body of water is not required to provide a barrier.

F. An owner of a wading pool or spray ground is not required to separate the wading pool and spray ground with a barrier.

G. An owner of a spray ground that is part of an aquatic facility with a body of water is not required to provide a barrier if:

(1) An unobstructed path with a minimum horizontal distance of 30 feet is provided between the edge of the spray ground deck closest to the body of water and the water's edge closest to the spray ground; or

(2) An obstructed path with a minimum horizontal distance of 15 feet is provided between the edge of the spray ground deck closest to the body of water and the water's edge closest to the spray ground.

## **.22 Decks.**

A. An owner shall ensure that:

(1) [A deck at a recreational or semipublic pool] A perimeter deck at a public pool or spray ground:

(a) [Completely surrounds] Surrounds at least 75 percent of the pool or spray ground perimeter;

(b) Is [continuous]:

(i) Continuous, with a minimum unobstructed width of 4 feet and an average width of 6 feet[.]; and

[(c) Is in] (ii) In conformance with the American National Standard for Public Swimming Pools; and

(c) Is not:

(i) Constructed of wood; and

(ii) More than 30 inches below the static water level;

(2) A perimeter deck at a public spa is [in]:

(a) In conformance with the American National Standard for Public Spas; and

(b) Not constructed of wood;

(3) The slope of a deck is away from [a pool or a spa] an aquatic venue, toward points of disposal, and not less than [1/4] 3/16 inch per foot, or greater than 1/2 inch per foot;

(4) The deck has drainage to deck drains or other points of disposal in compliance with COMAR 26.04.02;

(5)—(6) (text unchanged)

(7) A brick, stone, aggregate, or similar deck surface has a subdeck [in the required deck area];

(8) A wood deck has a gravel and plastic ground barrier or a concrete subdeck [in the required deck area]; [and]

(9) The deck does not trap dirt or support [or harbor algae.] the harborage of algae; and

(10) Carpet is not installed on the deck surface of the perimeter or pool deck.

B. An owner may:

(1) Include the deck level coping of a pool or spa [coping] in the measurement of the deck width; and

(2) (text unchanged)

C. Except as provided in §B(2) of this regulation, an owner may not have light poles, structural supports, decorative fountains, waterfalls, and other obstacles or obstructions within 4 feet of a pool or within the required deck area of a spa or spray ground.

D. (text unchanged)

## **.22-1 Handholds.**

An owner shall ensure that:

A. A handhold is installed:

(1) Anytime the water depth of the aquatic venue exceeds 24 inches;

(2) Not greater than 9 inches above or 3 inches below the static water level of the aquatic venue; and

(3) Not greater than 2 inches or less than 1 inch from the vertical plane of the aquatic venue wall; and

B. The thickness of the handhold does not exceed 3.5 inches for the last 2 inches of the overhang.

## **.22-2 Infinity Edges.**

An owner shall ensure that:

A. The length of an infinity edge shall be no more than 30 feet long when in water depths greater than five feet;

- B. Handholds conforming to the requirements of Regulation .22-1 of this chapter are provided for infinity edges;
- C. Infinity edges are constructed of reinforced concrete or other impervious and structurally rigid material(s), and designed to withstand the loads imposed by pool water, bathers, and adjacent soils or structures;
- D. Troughs, basins, or capture drains designed to receive the overflow from infinity edges:
  - (1) Are watertight and free from structural cracks;
  - (2) Have a non-toxic, smooth, and slip-resistant finish; and
  - (3) Are equipped with grates;
- E. The maximum height of the wall outside of the infinity edge does not exceed 30 inches to the adjacent grade and capture drain;
- F. The perimeter deck of an infinity edge pool must surround a minimum of 50 percent of the pool;
- G. The maximum height of the wall outside of the infinity edge shall be a minimum of 16 inches and a maximum of 19 inches to the adjacent grade and capture drain for the deck to be considered a perimeter deck; and
- H. The height of the wall outside of the infinity edge is at least 16 inches to the adjacent grade and capture drain.

### **.23 Equipment Rooms.**

An owner shall ensure that [a recreational pool, semipublic pool, or public spa] *an aquatic venue* has an equipment room that:

- A. [Houses the pool or spa] *Except when the manufacturer requires a piece of equipment to be outside the equipment room for proper operation, houses the aquatic venue* circulation, filtration, and disinfection equipment; and
- B. Has:
  - (1)—(3) (text unchanged)
  - (4) [A waterproof floor that drains to a floor drain] *A floor:*
    - (a) *Constructed of concrete or other suitable material having a smooth slip resistant finish and a positive drainage, including a sump drain pump if necessary; and*
    - (b) *Sloped toward the floor drain or a sump drain pump adequate to prevent standing water at all times;*
  - (5) [A lockable entrance door that allows complete and unencumbered access to the equipment room;] *An entrance door that:*
    - (a) *Allows complete and unencumbered access to the equipment room;*
    - (b) *Is equipped with:*
      - (i) *An automatic closer;*
      - (ii) *An automatic lock; and*
      - (iii) *A lock that requires a key or combination to open from the outside;*
    - (c) *Is installed and maintained to ensure that the door closes completely and latches without human assistance; and*
    - (d) *Is designed and installed to be opened by one hand from the inside of the room under all circumstances, without the use of a key or tool;*
  - (6) A minimum of [20 foot-candles] *20 lumens of artificial illumination per square foot of floor space within the equipment room;*
  - (7) Ventilation sized at 2 cubic feet per minute per square foot of floor area that [is:
    - (a) *Mechanical] has a continuous mechanical exhaust ventilation with the exhaust vent intake placed at a height less than or equal to 3 feet from the floor of the equipment room, discharged to limit exposure to the public [if chemicals are used or stored in the equipment room, or*
    - (b) *Natural or mechanical exhaust ventilation if chemicals are not used or stored in the equipment room];*
  - (8) (text unchanged)
  - (9) A hose bibb with an atmospheric vacuum breaker *or a hose bibb with an atmospheric vacuum breaker that is accessible within 50 feet of the equipment room so that a hose can service the entire equipment room;* and
  - (10) A water-resistant data sheet that is posted in a conspicuous place for each [pool or spa] *aquatic venue* and includes the following information:
    - (a) *Volume of water[,] in the pool, spa, or surge tank of a spray ground;*
    - (b) *Minimum turnover rate[,] in gpm;*
    - (c) *Maximum filter capacity[,] in gpm;*
    - (d) *Water surface [area,] or splash zone area in square feet;*
    - (e) *[Length] Except for a spray ground, the length of water perimeter[,] in feet;*
    - (f) *Maximum [bather] user load[, and];*
    - (g) *Operating instructions for valves and equipment[.]; and*
    - (h) *For aquatic venues that use salt chlorine generators, the total dissolved solids level in ppm once the minimum amount of salt has been added to an aquatic venue.*

### **.24 Pipe Material and Identification.**

An owner shall ensure that [pipe]:

- A. *Pipe material for [a public pool or spa] an aquatic venue conforms to COMAR 09.20.01[.];*
- B. *Identification is provided for main drains, skimmers, filtered water, make-up water, backwash water, disinfection feeds, acid feeds, compressed air lines, gutters, chemical sample piping, and heating lines;*
- C. *All piping is marked with directional arrows to indicate flow direction during filtration; and*
- D. *All valves are:*
  - (1) *Clearly identified by number with a brass tag, plastic laminate tag or permanently affixed alternate; and*
  - (2) *Described as to their function in an operating instruction manual.*

### **.25 Circulation Systems.**

A. Gauges and Release Valves. An owner shall ensure that the circulation system for [a recreational pool, semipublic pool, or public spa] *an aquatic venue* includes the following, a:

- (1) [A pressure] *Pressure gauge on [the] each filter or on the influent side of the filter piping;*
- (2) [A pressure] *Pressure gauge on the effluent side of the filter piping;*
- (3) [A vacuum] *Vacuum or compound gauge on the influent side of a pump;*
- (4) [A flow] *Flow meter that:*
  - (a) (text unchanged)

(b) Has a permanent scale readable in [gallons per minute] *gpm*;

(c)—(d) (text unchanged)

(5) [A thermometer] *Thermometer* on the return line to [a pool or spa] *an aquatic venue* if the circulation system includes a heating system; and

(6) [A manually] *Manually* operated air release valve on a pressure filter or a separation tank, or both.

**B. Turnover Rate.**

(1) An owner shall ensure that *an aquatic venue is constructed to produce a minimum turnover rate (volume of the aquatic venue divided by maximum turnover time (t)), with continuous 24 hour flow using the values for (t) provided in the following table:*

[(1) A recreational pool, semipublic pool, or public spa is constructed to produce the following minimum turnover rates, with continuous 24-hour flow:

(a) Pools for swimming and diving: Minimum turnover rate = volume of pool in gallons/480 minutes;

(b) Pools for water recreational attractions and therapy: Minimum turnover rate = volume of pool in gallons/360 minutes;

(c) Pools for wading have a minimum turnover rate equal to the greater of:

(i) Volume of pool in gallons/120 minutes; or

(ii) The minimum flow required for the skimmer system and main drain to operate according to the manufacturer's specifications;

and

(d) Spas: Minimum turnover rate = volume of spa/30 minutes;

(2) The flow through a circulation system is maintained between the minimum turnover rate and the design capacity of the filter system and associated piping; and

(3) A limited public-use pool has a turnover rate in conformance with:

(a) American National Standard for Residential Inground Swimming Pools; or

(b) American National Standard for Aboveground/Onground Residential Swimming

Pools.]

<i>Type of Aquatic Venue</i>	<i>Maximum Turnover Time (t)</i>
<i>Any Aquatic Venue Not Specifically Listed</i>	<i>360 minutes</i>
<i>Limited Public-Use Pool</i>	<i>720 minutes</i>
<i>Spa</i>	<i>30 minutes</i>
<i>Spray Ground</i>	<i>30 minutes</i>
<i>Therapy Pool</i>	<i>240 minutes</i>
<i>Wading Pool</i>	<i>60 minutes</i>
<i>Water Recreational Attraction</i>	<i>120 minutes</i>

**C. Head Loss Calculations.** An owner of [a recreational pool, semipublic pool, or public spa] *an aquatic venue* shall ensure that head loss calculations include the following:

(1)—(2) (text unchanged)

(3) Elevation of pump suction and discharge in relation to the [pool or spa] *aquatic venue* water surface level *or the surge tank*; and

(4) (text unchanged)

**D. Surface to Bottom Flow Ratio and Water Circulation.**

(1) An owner of a recreational pool, semipublic pool, or public spa *constructed with both surface and bottom outlets* shall ensure that:

(a)—(b) (text unchanged)

(2) (text unchanged)

(3) *An owner of a public spray ground shall ensure that piping for outlets is designed to accommodate 100 percent of the flow.*

(4) *An owner of a recreational pool, semipublic pool or spa may construct the pool or spa with only surface outlets provided:*

(a) *Where the width of the pool or spa exceeds 30 feet, return inlets are not installed solely on the wall; and*

(b) *The circulation system is capable of meeting the required minimum turnover rate in §B of this regulation.*

**E. Filter Capacity.** An owner of [a recreational pool, semipublic pool, or public spa] *an aquatic venue* shall ensure that a filter:

(1) Operates within the filter design flow rate; *and*

(2) (text unchanged)

**F. Interconnections Between [Pools] Aquatic Venues.** An owner of [a recreational pool, semipublic pool, or public spa] *an aquatic venue* shall ensure that a pool is not interconnected with a:

(1) Spa or wading pool except during the filling of a spa or wading pool; [and] *or*

(2) Spray [pool] *ground*.

**.26 Circulation System Components.**

A. Except as provided in [§B] §§B and H(1) of this regulation, an owner of [a recreational pool, semipublic pool, or public spa] *an aquatic venue* shall ensure that circulation system components, including skimmers, pumps, filters, multiport valves, adjustable output rate chemical feeders, flow-through chemical feeders, chemical process equipment, chlorine generators, ion generators, and other [pool and spa] *aquatic venue* equipment comply with [Circulation System Components and Related Materials for Pools, Spas/Hot Tubs] *Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities*.

B. The Secretary shall accept [swimming pool, spa, or hot tub] *aquatic venue* circulation system components as meeting the requirements set forth in §A of this regulation if these items are in the current published NSF listing of swimming pool, spa, or hot tub circulation system components or a listing from organizations accredited by the American National Standards Institute (ANSI) for the certification of circulation system components.

C. Chemical Feeder and Process Equipment. An owner of [a recreational pool, semipublic pool, or public spa] *an aquatic venue* shall ensure that the capacity of chemical feeder and process equipment is adequate to:

(1) Provide the minimum required disinfectant residual to the [pool or spa] *aquatic venue* water, as required [in] by Regulation .44A of this chapter; and

(2) Establish breakpoint when the combined chlorine level is *at or over* [0.2] *0.4* ppm.

D. Chlorine Gas Feeders. An owner of [a recreational pool, semipublic pool, or public spa] *an aquatic venue* [shall ensure that the:

(1) Equipment installation, and operation of a chlorine gas feeder are in compliance with the American National Standard for Public Swimming Pools, with the exception that the word “shall” is substituted for the word “should”, and the owner is required to comply with the specifications of Appendix E; and

(2) Recirculated water is treated downstream of the chlorine gas injection point to maintain the water’s pH between 7.2 and 7.8.] *may not allow the use of chlorine gas feeders as a means of disinfecting an aquatic venue.*

E. Vacuum Systems.

(1) An owner shall ensure that a [recreational pool, semipublic pool, or] public *pool or spa* has a vacuum system for cleaning the pool or spa floor.

(2) An owner of a [recreational pool, semipublic pool, or] public *pool or spa* may use skimmer outlet pipes for vacuum purposes for a circulation [systems] *system* with four or fewer skimmers.

(3) For a circulation [systems] *system* with more than four skimmers or a gutter system, an owner of a [recreational pool, semipublic pool, or] public *pool or spa* shall ensure that a vacuum system is provided that is separate from the skimmer or gutter system.

(4) If a vacuum [fittings are] *fitting* is provided within a [recreational pool, semipublic pool, or] public *pool or spa*, the owner shall ensure that the [fittings are] *fitting* is:

(a) Located at a convenient [locations] *location* approximately 1 foot below the water surface; and

(b) Provided with a flush removable [caps] *cap or a spring loaded safety cover either of which shall be in place at all times.*

(5) When the vacuum system is an integral part of the circulation system, an owner of a [recreational pool, semipublic pool, or] public *pool or spa* shall ensure that the vacuum line connection is before the pump hair and lint strainer.

F. Carbon Dioxide Feeders. An owner of [a recreational pool, semipublic pool, or public spa] *an aquatic venue* shall ensure that a carbon dioxide feeder system is:

(1) (text unchanged)

(2) Located in a [ventilated] *chemical storage area that meets the requirements provided in Regulation .29 of this chapter; [and]*

(3) Secured to prevent damage to the gas cylinder if the cylinder is subject to tipping[.]; *and*

(4) *Where carbon dioxide cylinders are located indoors, a monitor and alarm is provided to alert patrons and operators of carbon dioxide levels at or exceeding 1,000 ppm or an oxygen concentration at or below 19.5 percent.*

G. Ozone Systems. An owner of [a recreational pool, semipublic pool, or public spa] *an aquatic venue* shall ensure that:

(1) *Chemicals, solvents, or combustible materials, other than those required for the operation of the recirculation and ozone generating equipment, are not stored in a room where ozone is used;*

(2) *Rooms which are designed to include ozone equipment are equipped with an emergency ventilation system capable of six air changes per hour;*

(3) *The exhaust intake is located 6 inches from the floor, on the opposite side of the room from the make-up air intake;*

(4) *The emergency ventilation system is arranged to run on command of an ozone-leak alarm or on command of a manual switch;*

(5) *The manual emergency ventilation switch is located outside the room and near the door to the room containing the ozone generation equipment;*

(6) *Ozone rooms which are below grade are equipped with forced-draft ventilation capable of six air changes per hour;*

(7) *The ventilation system is arranged to run:*

(a) *Automatically concurrent with the ozone equipment and for at least a time allowing for 15 air changes after the ozone equipment is stopped;*

(b) *Upon activation of the ozone detection and alarm system; and*

(c) *On command of a manual switch;*

(8) *A room containing ozone generation equipment is equipped with an audible and visible ozone detection and alarm system;*

(9) *The alarm system consists of both an audible alarm capable of producing at least 85 decibels at 10 feet distance, and a visible alarm consisting of a flashing light mounted in plain view of the entrance to the room containing the ozone generation equipment;*

(10) *The ozone sensor is located at a height between 18 and 24 inches above floor level and is capable of measuring ozone in the range of 0 to 2 ppm;*

(11) *The alarm system will alarm when the ozone concentration equals or exceeds 0.1 ppm in the room;*

(12) *The activation of the alarm system will shut off the ozone generating equipment and turn on the emergency ventilation system;*

[1] (13) An ultraviolet light ozone system is used and installed according to [Circulation System Components and Related Materials for Pools, Spas/Hot Tubs] *Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities (NSF/ANSI 50-2013);*

[2] (14) A corona discharge ozone system is used and installed according to [Circulation System Components and Related Materials for Pools, Spas/Hot Tubs] *Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities (NSF/ANSI 50-2013), and the following requirements:*

(a)—(b) (text unchanged)

(c) The system is designed to provide a contact time of:

(i) [2] *Two minutes when used in conjunction with a chlorine disinfectant; or*

(ii) [1] *One minute when used in conjunction with a bromine disinfectant;*

(d)—(l) (text unchanged)

(m) The ozone gas output is under negative pressure or a vacuum; *and*

[n] The ozone generation area is ventilated at 2 cfm per square foot of floor area to prevent the build up of excess ozone; *and]*

[o] (n) (text unchanged)

H. [An owner of a recreational pool, semipublic pool, or public spa may connect an equalization line for a skimmer to the main drain line in a wading pool, or other pool that does not have sufficient water depth, for the installation of the equalizer line through the pool wall below the skimmer throat.] *Skimmers.*

(1) *The Secretary shall accept skimmers on a recreational pool, semipublic pool, or public spa as meeting the requirements set forth in §A of this regulation and not require the installation of equalizer lines or equalizer line covers if:*

(a) *The skimmer is connected to another skimmer or main drain line that cannot be isolated by a valve or other means;*

(b) *The skimmer is provided with a vented lid;*

(c) *Except for an equalizer line, the skimmer is in compliance with Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities;*

(d) The flow rate through the skimmer is not less than 14 or greater than 35gpm; and

(e) The skimmer is provided with a means for adjusting the flow rate; and

(2) The owner shall ensure that:

(a) One skimmer is provided per:

(i) 50 feet of aquatic venue perimeter; or

(ii) 500 square feet of aquatic venue water surface area or fraction thereof, whichever is greater;

(b) A minimum of two skimmers are installed; and

(c) The skimmers are spaced to provide maximum skimming action of the water surface.

I. An owner shall ensure that all chemical feeders that operate independently of the circulation pump are provided with an automatic means to be disabled through an electrical interlock with at least one of the following:

(1) Recirculation pump power;

(2) Flow meter, flow switch, or pressure switch in the return line; or

(3) Chemical control power and paddle wheel or flow cell on the chemical controller if safety test confirms feed systems are disabled through the controller when the pump is turned off, loses prime, or filters are backwashed.

## **.27 Diving Area and Equipment.**

An owner of a public pool shall ensure that:

[A.] — [B.] (proposed for repeal)

A. The dimensions of aquatic venue diving area are in conformance with §§6.5—6.6.2 of the American National Standard for Public Swimming Pools;

[C.] B. Diving equipment is installed in compliance with [§§7.2.5—7.2.5.6] §§7.2.5—7.2.5.7 of the American National Standards for Public Swimming Pools;

[D.] C. Unobstructed clearance is provided for a diving board in conformance with the following minimum dimensions:

(1) A minimum height [of:

(a) 13 feet measured upward from the plummet of a diving board; or

(b) Greater than 13 feet if specified by the manufacturer of the diving board] in conformance with §7.2.3 of the American National Standard for Public Swimming Pools;

(2) A clearance as required [in §D(1)] by §C(1) of this regulation extending:

(a)—(c) (text unchanged)

(3) (text unchanged)

(4) A minimum distance between a diving board plummet and a side wall of:

(a) 10 feet for a diving board [20 inches] 1 meter or less above the water line; and

(b) 12 feet for a diving board greater than [20 inches] 1 meter above the water line;

[E.] D.—[F.] E. (text unchanged)

## **.28 [Suction] Entrapment Prevention.**

To prevent [a suction] an entrapment hazard, an owner shall ensure that:

[A. A vacuum fitting is capped when not in use;]

[B.] A. A vacuum line is equipped with an independent valve and the valve is in the closed position when not in use;

[C.] B. Except as provided in [§§F and G] §E of this regulation, the main drain for a [public]:

(1) Public pool or spa complies with 15 U.S.C. §8003 and is:

[(1)] (a) Connected to a minimum of two main drain outlets that are:

[(a)] (i) Not isolated by a valve or other means;

[(b)] (ii) Spaced at least 3 feet [from edge to edge] apart measured from center to center of sump or located on two different planes;

and

[(c)] (iii) Hydraulically balanced; or

[(2)] (b) An unblockable drain[.]; and

(2) Within the splash zone of a public spray ground complies with 15 U.S.C. §8003;

[D.] C. A drain is covered with a securely attached drain cover in compliance with the:

[(2)] (1) American National Standard for Public Swimming Pools; and

(2) 15 U.S.C. §8003[.];

[E.] D. A skimmer [is:

(1) Connected to an equalization line, main drain line, vent, or another skimmer that cannot be isolated by a valve or other means, or

(2) Provided with a vented lid;] complies with Regulation .26A of this chapter;

[F.] E. A public pool or spa constructed before February 10, 1997 is provided [by June 1, 2002,] with:

(1) At least two hydraulically balanced drain outlets [spaced a minimum of 3 feet from edge to edge that cannot be isolated to create a single outlet for each circulation pump, as illustrated in Regulation .28-1A of this chapter] in compliance with §B(1) of this regulation;

(2) [A channel] An unblockable drain system that [is at least 3 feet from edge to edge, as illustrated in Regulation .28-1B of this chapter] complies with §B(1) of this regulation; or

(3) An approved safety vacuum release system[.]; and

[G. As an interim measure, until a pool or spa constructed before February 10, 1997 is in compliance with §F of this regulation:

(1) A pool or spa has a minimum of two outlets that cannot be isolated to create a single outlet per pump; and

(2) These outlets are provided by connecting the main drain line to a skimmer line so that the lines cannot be isolated to create a single outlet, as illustrated in Regulation .28-1C of this chapter, assuring that:

(a) The skimmer line does not become blocked within the skimmer housing at any time;

(b) Associated valves are locked in an open position to prevent the drain or the skimmer from becoming a single source of suction; and

(c) Associated valves are permanently tagged with a warning to maintain the valves in the open position at all times when the pool or spa is in use;

H. A pool or spa is in compliance with the following:]

F. An owner shall ensure that:

(1) A *submerged* suction outlet is provided with a cover that complies with the American National Standard for Public Swimming Pools;

(2) A *submerged* suction [fitting] outlet complies with 15 U.S.C. §8003;

(3) [Suction] A *submerged suction* outlet [covers are] cover is in good condition, with no breaks, cracks, or other defects that could affect the structural integrity of the cover;

(4) [Suction] A *suction* outlet [covers are] cover is secured according to manufacturers' directions and in such a way that the [covers] cover cannot be removed without the use of [tools] a tool;

(5) [A pool or spa that does not have] When an aquatic venue has a *submerged* suction [outlets] outlet that is not in compliance with this regulation [has], all pumps are immediately shut off and the aquatic venue is closed until [the pool or spa has been] brought into compliance with this regulation;

(6) (text unchanged)

[(7) A pool or spa facility has a comprehensive written maintenance program that addresses the following:

(a) If a suction outlet cover is cracked or broken, the pump shall be immediately shut off and the cover shall be replaced;

(b) Covers shall be anchored in accordance with the manufacturer's specifications and supplied parts, and only manufacturer specified, noncorrosive fasteners may be used;

(c) Lines and equipment shall be labeled or color coded for ready identification; and

(d) The on/off switch for circulation pumps shall be clearly identified and labeled; and]

(7) A comprehensive written maintenance program is prepared and implemented that includes procedures for the operator to:

(a) Keep the written maintenance program on file with the operating records at the aquatic venue;

(b) Make the written maintenance program available to the Department for inspection;

(c) Shut off the pump and close the aquatic venue should the operator discover a suction outlet cover that is cracked, broken or otherwise not in compliance with §F(3) of this regulation;

(d) Replace a suction outlet cover that is cracked, broken or otherwise not in compliance with §F(3) of this regulation;

(e) Close the aquatic venue if the circulation pump is off for longer than 15 minutes; and

(f) Not allow the use of the aquatic venue until the circulation pump is operating if the circulation pump is found to be off before opening the aquatic venue; and

(8) [Check valves] A check valve in the suction line to [pumps are] a pump is removed to allow backflow of water or air to release the suction when the pump is shut off or when an influent blockage detection device is activated[; and

I. A pool and spa operator completes the Pool and Spa Entrapment Hazards Checklist provided by the Secretary, or an equivalent form, on a daily basis before the pool or spa is open for that day's use].

#### **.29 Chemical Storage Area.**

An owner shall ensure that [a recreational pool, semipublic pool, or public spa] an aquatic venue has a chemical storage area that:

A. (text unchanged)

B. Has:

(1) [A lockable door which can be opened from the inside,] An entrance door that:

(a) Allows complete and unencumbered access to the chemical storage area;

(b) Is equipped with:

(i) An automatic closer;

(ii) An automatic lock; and

(iii) A lock that requires a key or combination to open from the outside;

(c) Is installed and maintained to ensure that the door closes completely and latches without human assistance; and

(d) Is designed and installed to be opened by one hand from the inside of the room under all circumstances, without the use of a key or tool;

(2) [Ventilation] Continuous mechanical exhaust ventilation with the exhaust vent intake placed at a height less than or equal to 3 feet from the floor of the chemical storage area, discharged to limit exposure to the public that is sized at 2 cfm per square foot of floor area and that exhausts to the open air[.];

(3) A minimum of 20 [footcandles] 20 lumens of illumination[.] per square foot of floor space within the chemical storage area; and

(4) Storage for chemicals in accordance with the [material] safety data sheet for a particular chemical.

#### **.31 Filter Backwash Water and Deck Drainage Disposal.**

A. An owner shall ensure that:

(1) The disposal of filter backwash water and [pool or spa] aquatic facility and venue wastewater conforms with:

(a) COMAR 09.20.01[.];

(b) Local sanitary code requirements[.]; and

(c) Discharge requirements of COMAR [26.08.01 ----- 26.08.04] 26.08.01—26.08.04; and

(2) Deck drainage disposal conforms with:

(a) COMAR 09.20.01[.]; and

(b) (text unchanged)

B. An owner may not return filter backwash water or other wastewater to [a pool or spa,] an aquatic venue except for filter backwash water that has been filtered to remove particulates and treated to eliminate coliform bacteria and waterborne pathogens.

#### **.32 Illumination of Water, Deck, and Walkway.**

An owner shall ensure that an indoor [recreational pool, semipublic pool, or public spa,] aquatic venue or one used [during nighttime] before sunrise or after sunset, is provided with:

A. (text unchanged)

B. Illumination of the water and deck of an aquatic venue that is:

(1) A combination of underwater lighting and deck lighting so that the:

(a) Underwater lighting [yields] provides at least [0.5 watt] 8 lumens per square foot of water surface area[.]; and

(b) [Deck lighting yields] Lighting for the required deck area provides at least [0.6 watt] 10 lumens per square foot of required deck area [or at least 15 footcandles]; or

(2) [Overhead lighting yielding] *Lighting for the required deck area provides at least [2 watts] 20 lumens per square foot of required deck area [or at least 20 footcandles of light] that is directed onto the deck and the water surface so that the bottom of the entire [pool or spa bottom] aquatic venue is clearly visible;*

C. Lighting that minimizes reflection from the water surface [so that the visibility of the pool or spa bottom is not obscured; and] *so that the entire bottom of an aquatic facility is clearly visible;*

D. Walkway lighting yielding at least [15 footcandles of light.] *10 lumens per square foot of the walkway; and*

E. *Illumination of the splash zone and deck that provides at least 10 lumens per square foot of the splash zone and deck.*

### **.33 Ventilation of an Indoor [Recreational Pool, Semipublic Pool, or Public Spa] Aquatic Venue.**

An owner shall ensure that an indoor [recreational pool, semipublic pool, or public spa] *aquatic venue* has:

A. A [ventilating] *ventilation* system capable of:

(1) Exhausting 1 1/2 cfm of air per square foot of enclosed area[, or]; *and*

(2) Dehumidifying the recirculated air from the enclosed area; [and]

B. Make-up air equal to the volume of exhausted air or as required [in] *by the ventilation system specifications[.],has a ventilation system equipped with;*

C. *An exhaust vent placed at a height less than or equal to 3 feet from the floor of the natatorium; and*

D. *A make-up air vent place on the opposite side of the natatorium from the exhaust vent.*

### **.34 Plumbing.**

A. Water Supply System. An owner shall ensure that a water supply system at [a public pool or spa] *an aquatic venue* is in conformance with:

(1) COMAR 26.04.01[, 26.04.03, and 26.04.04;]

[(2) COMAR 09.20.01; and]

[(3)] (2) *COMAR 26.04.03;*

(3) *COMAR 26.04.04;*

(4) *COMAR 09.20.01; and*

(5) (text unchanged)

B. Sewage Disposal System. An owner shall ensure that a sewage disposal system at [a public pool or spa] *an aquatic venue* is in conformance with:

(1) COMAR 26.04.02 [and 26.04.03];

(2) [COMAR 09.20.01; and] *COMAR 26.04.03;*

(3) *COMAR 09.20.01; and*

[(3)] (4) (text unchanged)

C. Drinking Fountains. An owner shall ensure that [a recreational pool, semipublic pool, or public spa enclosure] *an aquatic venue* has at least one drinking fountain *within 100 feet of the entrance gate to an aquatic venue* for every 5,000 square feet of water surface *or splash zone* area.

D. Hose Bibbs. An owner of [a recreational pool, semipublic pool, or public spa] *an aquatic venue* shall ensure that the following locations have an accessible hose bibb equipped with an atmospheric vacuum breaker:

(1) (text unchanged)

(2) *In an equipment room or that is accessible within 50 feet of the equipment room so that a hose can service the entire equipment room;*

and

(3) (text unchanged)

E. Fill Spouts and Automatic Water Level Controllers.

(1) If a fill spout is installed at a public pool or spa, the owner shall ensure that the fill spout is:

[(1)] (a) Installed within 10 inches of a ladder or handrail or in front of a lifeguard stand whose supports are immediately adjacent to the pool or spa [rim] *coping*, so that the fill spout does not present a tripping hazard or a puncture hazard;

[(2)] (b) (text unchanged)

[(3)] (c) Braced or constructed so the fill spout does not flex downward; [and]

[(4)] (d) Provided with a flexible cover on the tip of the fill spout [if the spout presents a potential for injury to an individual using a pool or spa.]; *and*

(e) *Installed with an air gap that:*

(i) *Is two times the diameter of the fill spout; and*

(ii) *Separates the fill spout from the maximum water level of the pool or spa.*

(2) *If an automatic water level controller or inline manual fill is installed at a public pool, spa or spray ground, the owner shall ensure that an air gap or other approved backflow prevention device is provided.*

F. Backflow Prevention. An owner of [a public pool or spa] *an aquatic facility* shall ensure that[:

(1) A pool or spa] *an aquatic facility* has backflow protection for:

[(a)] (1) A potable water supply, in conformance with COMAR 09.20.01[.]; and

[(b)] (2) Wastewater, in conformance with COMAR 09.20.01[; and

(2) An air gap that is two times the diameter of the fill spout separates the fill spout from the flood rim level of the pool or spa].

G. Source of Water. An owner of [a public pool or spa] *an aquatic venue* shall ensure that:

(1) When [a public pool or spa] *an aquatic venue* is filled with water from a [nonpotable] *non-potable* source, such as a water tank holding [nonpotable] *non-potable* water or surface water[, the]:

(a) [Water] *The water* is filtered, treated, and disinfected after addition to the [pool or spa] *aquatic venue* to meet the requirements of Regulation .44 of this chapter[.]; and

(b) [Pool or spa] *An aquatic venue* is not used until a bacteriological sample taken by the Secretary indicates that there are no coliform organisms in the water; and

(2) [Public pool or spa] *Aquatic venue* make-up water:

(a) Is from a potable source[.]; and

(b) Having an iron level over 0.3 ppm is treated to lower the iron level to 0.3 ppm or less before the make-up water is added to [a pool or a spa] *an aquatic venue*.

### **.35 Toilet, Hand Sink, and Shower Facilities.**

A. Except as provided in §B of this regulation, an owner shall ensure that [a recreational pool, semipublic pool, or public spa] *an aquatic venue* has:

(1) A bathhouse, toilets, hand sinks, and showers within 100 feet of an entrance gate to the [pool or spa] *aquatic venue* [in accordance with the American National Standard for Public Swimming Pools, Articles 19.1—19.6.13];

(2) At least a minimum number of toilets, hand sinks, and showers based on:

(a) The [maximum user load of the pool or spa] *theoretical peak occupancy* as set forth in Regulation [.19] .19B of this chapter;

(b) Fixture ratios [set forth in §A(1) of this regulation] *in accordance with the American National Standard for Public Swimming Pools, Articles 19.1—19.6.13*; and

(c) (text unchanged)

(3) 50 percent of the required fixtures designated for use by each sex, unless the [pool or spa] *aquatic venue* is for one sex only; and

(4) (text unchanged)

B. An owner is not required to provide [toilet, hand sink, and] shower facilities at [a recreational pool, semipublic pool, or public spa] *an aquatic venue* when bathers have access to equivalent facilities in:

(1) Living quarters not more than 500 feet from [a pool or a spa] *an aquatic venue* entrance; or

(2) A building or buildings not more than 500 feet from [a pool or a spa] *an aquatic venue* entrance.

C. An owner shall ensure that equivalent facilities used by [recreational pool, semipublic pool, or public spa] *aquatic venue* bathers and patrons of a recreational center, health club, marina, or other facility are in compliance with:

(1)—(2) (text unchanged)

### **.36 Antiscald Protection for Showers.**

An owner of [a recreational pool, semipublic pool, or public spa] *an aquatic venue* shall ensure that each shower has an approved pressure-balanced, [antiscald] *anti-scald* device that limits the delivered water temperature to below 115°F.

### **.37 Accommodations for Disabled Individuals.**

An owner shall ensure that [a public pool or spa] *an aquatic venue* is in compliance with all applicable federal, State, and local codes governing facilities for disabled individuals, including COMAR 05.02.02.

### **.38 Equipment Installation and Operating Instructions.**

An owner of [a public pool or spa] *an aquatic venue* shall ensure that:

A. [Pool and spa] *Aquatic venue* equipment is installed according to manufacturers' instructions and this chapter;

B.—C. (text unchanged)

D. Operating instructions for the circulation and water treatment systems:

(1) Refer to the number, label, or color code of the valves, controls, and piping[.]; and

(2) (text unchanged)

### **.39 Maintenance.**

An owner of [a public pool or spa] *an aquatic facility or venue* shall ensure that:

A. An inspection of [the pool or spa and related facilities] *an aquatic facility and venue* is made at least once a [week] *day* by the operator for the purpose of maintaining [the pool or spa] *an aquatic facility and venue* in compliance with this chapter;

B. [The pool or spa and its related facilities are] *An aquatic facility and venue* is maintained in a safe, clean, and orderly condition;

C. A broken, damaged, or malfunctioning [fixture] *component* is promptly repaired or replaced; and

D. [The pool or spa is] *An aquatic facility and venue* are left in a safe condition when closed for the season.

### **.40 [Public Pool and Spa] Aquatic Facility and Venue Safety.**

A. First Aid and Lifesaving Equipment. An owner shall ensure that *a*:

(1) [A recreational] *Recreational* pool is provided with *a*:

(a) [A first aid kit as recommended by the American Red Cross] *Continuously stocked, adequate supply of first aid supplies to include, at a minimum*:

(i) *A First Aid Guide*;

(ii) *Absorbent compresses*;

(iii) *Adhesive bandages*;

(iv) *A roll of adhesive tape*;

(v) *Sterile pads*;

(vi) *Scissors*;

(vii) *A roll of elastic wrap*;

(viii) *An emergency blanket*;

[(b) A face mask for CPR] (ix) *A resuscitation mask with one-way valve*; and

[(c)] (x) *Disposable medical grade examination gloves*;

[(d)] (b) [A bloodborne] *Blood borne* pathogen control kit, to include, at a minimum:

(i) *Three antimicrobial towelettes*;

(ii) *One 7 to 10 gallon biohazard bag with tie*;

(iii) *One bottle of alcohol gel*;

(iv) *One roll of body fluid clean-up kit paper*;

(v) *One pair of nitrile ANSI gloves*;

(vi) *One 2 ounce bag of absorbent powder*;

(vii) *One bag*;

(viii) *One scoop*; and

(ix) *One small scraper;*

[(e)] (c) [A backboard] *Backboard* designed for medical emergency use that is equipped with straps and head immobilizer;

[(f)] (d) [A light] *Light*, strong rescue pole not less than 10 feet long; and

[(g)] (e) [A rescue] *Rescue* tube designed for lifesaving for each required lifeguard;

(2) [Except as set forth in §A(3) of this regulation, a public] *Public* spa is provided with the safety equipment required [in §A(1)(a)—(e)] by §A(1)(a)—(c) of this regulation; and

(3) [A semipublic] *Semipublic* spa or *public spray ground* is provided with the safety equipment required [in] by [§A(1)(a)—(d)] §A(1)(a)—(b) of this regulation; and

(4) [A semipublic] *Semipublic* pool is provided with a:

(a) (text unchanged)

(b) Ring buoy or similar approved floatation device with an attached throwing rope measuring 50 feet in length or [11/2] 1.5 times the width of the pool, whichever is longer.

B. Telephone. An owner shall ensure that, in case of an emergency, a telephone is available within the [pool or spa enclosure] *aquatic venue barrier* to individuals using [a public pool or spa] *an aquatic venue* that:

(1) *For a recreational pool, public spa, or public spray ground:*

(a) Can directly reach a 911 emergency service without the use of a coin and without connection to an internal switchboard;

[(2)] (b) Is posted with:

[(a)] (i) The names and phone numbers of the nearest available police, fire, and ambulance or rescue unit; or

[(b)] (ii) 911 or with any numbers necessary to reach a 911 emergency service center directly; and

[(3)] (c) Is posted with the name and [location of the pool or spa facility.] *physical address of the aquatic venue; and*

(2) *For a semipublic pool:*

(a) *Except for a guarded pool that is compliant with §B(1) of this regulation, can directly reach a 911 emergency service without dialing, the use of a coin, and without connection to an internal switchboard; and*

(b) *Complies with §B(1) of this regulation.*

C. (text unchanged)

D. Lifeguards.

(1) (text unchanged)

(2) Except as set forth in §D(1) and (3) of this regulation, an owner of a recreational pool shall have at least one lifeguard on duty on the deck observing the pool while [an individual is in the pool] *patrons are inside the pool barrier*, and shall have at the pool:

(a)—(b) (text unchanged)

(c) In addition to the number of lifeguards required [in §D(2)(b)] by §D(2) of this regulation, additional lifeguards on duty if:

(i)—(iv) (text unchanged)

(3) (text unchanged)

(4) In addition to meeting the other requirements of this chapter, an owner or operator of [a] *an aquatic* facility specified in the following paragraphs shall ensure that a:

(a) (text unchanged)

(b) Child care center has water safety supervision for pool activities at a child care center in compliance with COMAR [07.04.02.41] 13A.15.08.04; and

(c) (text unchanged)

(5) The owner may only use or employ a lifeguard who holds a valid lifeguard certification from:

(a)—(c) (text unchanged)

(d) Ellis and Associates [National Pool and Waterpark] *International Lifeguard Training Program*; or

(e) (text unchanged)

(6) Except as set forth in §D(1) and (3) of this regulation, an owner of a semipublic pool that has a water surface area greater than 2,500 square feet or that is part of a multiple pool facility within one enclosure that has a combined water surface area greater than 2,500 square feet shall ensure that at least one lifeguard is on duty on the deck observing a pool *at all times patrons are within the pool barrier and* in the ratio of one guard per 50 individuals in the water :

(a)—(b) (text unchanged)

E. CPR and First-Aid Personnel. Except at a *semipublic pool, semipublic spa, or public spray ground* an owner of [a recreational pool, public spa, and a limited public use pool] *an aquatic venue* shall ensure that:

(1) When the [pool or spa] *aquatic venue* is open for use, an individual is present and on site, holding a valid certification for:

(a) Infant/child/adult or professional rescuer [cardiopulmonary resuscitation (CPR)] *CPR*; and

(b) (text unchanged)

(2) The CPR and first aid certifications of the individual required [in] by §E(1) of this regulation are from:

(a)—(c) (text unchanged)

F. Safety Signs. An owner of [a public pool or spa] *an aquatic venue* shall ensure that:

(1)—(7) (text unchanged)

(8) A semipublic pool or public spa that does not have a lifeguard on duty has a conspicuous sign posted adjacent to entrances to the pool or spa reading “WARNING; NO LIFEGUARD ON DUTY. **SWIM AT YOUR OWN RISK.** DO NOT SWIM ALONE. CHILDREN UNDER 15 SHOULD NOT USE THE POOL WITHOUT ADULT SUPERVISION.”; [and]

(9) House rules are posted at the entrance to [a pool or spa.] *an aquatic venue; and*

(10) *A conspicuous sign posted adjacent to entrances to the aquatic venue reading, “Use of a public pool, spa, or spray ground is prohibited if you have an infectious or contagious disease that may be transmitted through water, an open cut, blister, other lesion, or diarrhea.”*

#### **.41 [Pool and Spa] Aquatic Venue Operator Certification.**

A. A person may not act as or perform the duties of [a public pool or spa] *an aquatic venue* operator without [a pool and spa] *an aquatic venue* operator certification card issued by the Secretary as required [in] by [§B and G] §§B and J of this regulation.

[B. The Secretary shall issue a 3-year public pool and spa operator certification card only to an individual 16 years old or older who has:

(1) Completed a 14-hour approved public pool and spa operator's course or a course offered by the Secretary with a minimum grade of 70 percent on an approved written examination given following the completion of that course; or

(2) Presented proof of previous certification and has:

- (a) Completed an approved 4-hour refresher course; or
- (b) Passed a challenge exam offered by the Secretary.]

*B. The Secretary shall issue an aquatic venue operator certification card to an individual who:*

(1) *Is 16 years old or older; and*

(2) *Has:*

(a) *Completed a 14 hour aquatic venue operator's course approved by the Secretary and passed, with a minimum grade of 75 percent, a written exam approved by the Secretary; or*

(b) *Presented a current aquatic venue operator certification card and has:*

(i) *Completed a 4 hour refresher course approved by the Secretary, and passed, with a minimum grade of 75 percent, a written exam approved by the Secretary; or*

(ii) *Passed, with a minimum grade of 75 percent, a challenge exam offered by the Secretary.*

*C. An individual who fails an exam, required by §B(2) of this regulation, may retake the exam one time before having to take the course and pass the exam.*

*D. An aquatic venue operator's certification card shall be valid for 3 years from the date the individual complies with §B(2) of this regulation.*

[C.] *E. The Secretary may summarily suspend [a pool and spa] an aquatic venue operator's certification card for 6 months if the operator does not comply with Regulation .43 of this chapter.*

[D.] *F. Hearing for Summary Suspension. In the case of the summary suspension of certification pursuant to [§C] §E of this regulation, the Secretary shall provide the certification card holder with written notice of the suspension and an opportunity for a hearing pursuant to State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland.*

[E.] *G. To preserve the right to a hearing, the certification card holder shall contact the Secretary within [30] 10 calendar days of the receipt of the notice of the suspension.*

*H. An aquatic venue operator whose certification card is suspended may apply for a new certification card:*

(1) *At the conclusion of the suspension period specified in §E of this regulation; and*

(2) *After completing the training requirements in §B(2)(a) of this regulation post suspension.*

[F.] *I. The Secretary shall recognize [a pool and spa] an aquatic venue operator certification as valid throughout the State.*

[G.] *J. The Secretary shall issue [a 3-year limited public-use pool operator certification card to an individual 16 years old or older who has completed:*

(1) *(text unchanged)*

(2) *The requirements of §B of this regulation.] a limited public-use pool operator certification card to an individual who:*

(1) *Is 16 years old or older; and*

(2) *Has:*

(a) *Completed a 4 hour limited public-use pool operator's course approved by the Secretary and passed with a minimum grade of 75 percent, a written exam approved by the Secretary; or*

(b) *Met the requirements of §B of this regulation.*

[H.] *K. An individual who possesses [a public pool and spa] an aquatic venue operator certification card may perform the duties of [a public pool and spa] an aquatic venue operator at [a limited public-use, recreational, and semipublic pool and public spa] any aquatic venue. An individual who possesses a limited public-use pool operator certification card may perform the duties of a limited public-use pool operator only at a limited public-use pool.*

#### **.42 Approval of Operator's Course.**

The Secretary shall approve [a pool and a spa] an aquatic venue operator's course based on the following criteria:

A. An approved course shall cover general aspects of [public pool and spa] aquatic venue operation including:

(1) [Applicable regulations,] *State and local regulations;*

(2) *Disease prevention[,] which shall cover CT values, recreational water infections (RWI), and response to formed-stool, diarrhea, blood, and vomit in and around an aquatic venue;*

(3) *Disinfection[,] which shall cover sanitation, cyanuric acid, non-chlorine oxidizers, combine chlorine, breakpoint chlorination, and alternate and supplemental systems;*

(4) *Filtration[,] which shall cover types of filters, normal operation, filter backwashing, cleaning, and pressure;*

(5) *Circulation which shall cover turnover rates, flow rates, and turnover times;*

[(5)] (6) *Circulation system components, operation, and maintenance[.];*

[(6)] (7) *General [pool and spa] aquatic venue maintenance and cleaning equipment[.];*

(7) *Operation and maintenance of equipment[.];*

(8) *Water chemistry[,] which shall cover water balance, saturation index, and dosing;*

(9) *Water testing[,] which shall cover testing methods and frequency;*

(10) *Record keeping and required reporting[.];*

(11) *[General pool and spa] Other aquatic venue chemicals[,] which shall cover water clarifiers, stain and scale inhibitors, enzymes, oxidizers, algae prevention, problems related to green hair, and other issues;*

[(12) *Chemical handling[,] Other Aquatic Venues which shall cover spas and spray grounds;*

(13) *Waste water disposal[.];*

(14) *Safety[,] which shall cover risk management and reduction, the Virginia Graeme Baker Pool and Spa Safety Act (VGB), gates and entry to the aquatic venue, barriers, chemical handling, spills, storage and disposal, safety equipment, and spa shut-off switch; and*

[(15) *Sanitation, and*

[(16)] (15) *Other pertinent topics as specified by the Secretary[; and].*

B. An approved course shall be taught by an individual who has demonstrated to the Secretary:

(1) *Expertise in the operational aspects listed in §A of this regulation, as evidenced by combined work experience, training, and formal education[, and];*

- (2) Successful completion of an approved [public pool and spa] aquatic venue operator's course; and
- (3) Current certification according to Regulation .41.

C. An individual approved to teach according to §B of this regulation may conduct the course online provided an individual taking the course completes the written examination required by Regulation .41 of this chapter in person.  
D. The Secretary may audit an aquatic venue operator's course, the course materials, or the instructor's credentials at any time.

#### **.43 [Pool and Spa] Aquatic Venue Operation.**

An owner shall ensure that a certified [pool and spa] aquatic venue operator:

A. (text unchanged)

B. Is available at a semipublic pool, public spa, [and at a] limited public-use pool, and public spray ground for performance of all requirements of this chapter and is able to [respond to operational problems] arrive at the aquatic venue within 15 minutes when not available on site;

C. Measures and records[, or supervises and verifies the measurement and recording of,] all information required [in] by Regulation .46 of this chapter;

D. Performs all duties related to the operation of [a pool or spa] an aquatic venue as required [in] by this chapter;

E. Cleans the filtration system when the filter pressure differential reaches a level specified by the equipment's manufacturer or as specified below:

- (1) High rate sand filters at 15 psi[.];
- (2) Rapid rate sand filters at 8 psi[.];
- (3) Cartridge filters at 10 psi[.];
- (4) Pressure diatomaceous earth filters at 10 psi[.]; and
- (5) (text unchanged)

F. (text unchanged)

G. Maintains water chemistry according to Regulation .45 of this chapter; [and]

H. Adds, while the aquatic venue is closed, a [nonstabilized] non-stabilized oxidizer into the [pool or spa] aquatic venue water equivalent to an amount of free chlorine equal to at least 10 times the measured combined chlorine residual plus sufficient free chlorine to oxidize the ammonia and nitrogenous compounds in the water, on a [recommended] schedule of once per week for a pool and once per day for a wading pool [and for a], spa[.]or spray ground; and

I. Documents the:

- (1) Date;
- (2) Time;
- (3) Combined chlorine residual, in ppm, before adding the oxidizer;
- (4) The amount of non-stabilized oxidizer added to the aquatic venue; and
- (5) The combined chlorine residual, in ppm, after adding the oxidizer.

#### **.44 Disinfection of [a Pool and Spa] an Aquatic Venue.**

A. An owner or operator of [a public pool or spa] an aquatic venue shall ensure that [a]:

(1) A primary disinfectant [or combination of disinfectants] is added to the water automatically through an approved chemical feeder to maintain [continuously] a residual level as specified below:

[(1) Free] (a) Except as provided by §A(1)(b) of this regulation, free chlorine shall be between:

- [(a)] (i) 1.5 ppm and [10.0] 10 ppm in pools for swimming and diving and water recreational attractions;
- [(b)] (ii) [3.0] 3 ppm and [10.0] 10 ppm in pools for wading or therapy or for a public spray ground; and
- [(c)] (iii) [4.0] 4 ppm and [10.0] 10 ppm in spas;

(b) For an aquatic venue where ORP is maintained above 680 and monitored by an approved automatic controller, free chlorine shall be between:

- (i) 1 ppm and 10 ppm in pools for swimming and diving and water recreational attractions; and
- (ii) 2.5 ppm and 10 ppm in pools for wading or therapy or for a public spray ground; and
- (iii) 3.5 ppm and 10 ppm in spas;

[(2)] (c) The maximum amount of combined chlorine shall be [0.2] 0.4 ppm for all [pools and spas] aquatic venues;

[(3)] (d) [Total] Except as provided in §A(1)(e) of this regulation, total bromine shall be between:

- [(a)] (i) [3.0] 3 ppm and [8.0] 10 ppm in pools for swimming and diving and water recreational attractions; and
- [(b)] (ii) [4.0] 4 ppm and [8.0] 10 ppm in spas [and in], pools for wading or therapy, and public spray grounds; and
- (e) For an aquatic venue where ORP is maintained above 680 and monitored by an approved automatic controller, total bromine shall

be between:

- (i) 2 ppm and 10 ppm in pools for swimming and diving and water recreational attractions; and
- (ii) 3 and 10 ppm in spas, pools for wading or therapy, and public spray grounds; and

(2) For an aquatic venue using supplemental disinfectant in conjunction with a primary disinfectant that:

[(4) For pools and spas] (a) For an aquatic venue using copper and silver ions [as a secondary disinfectant in conjunction with chlorine or bromine as a primary disinfectant]:

- [(a)] (i) Copper ions shall be between 0.2 ppm and [1.0] 1 ppm;
- [(b)] (ii) Silver ions may not exceed 0.05 ppm;

[(c) Free] (iii) In pools for swimming and diving and water recreational attractions, chlorine in combination with copper and silver ions shall be between[

- (i) 0.5 ppm and 10 ppm [in pools for swimming and diving and water recreational attractions, and];

[(ii)] (iv) In spas, pools for wading or therapy, and public spray grounds, chlorine in combination with copper and silver ions shall be between 1.5 ppm and [10.0] 10 ppm [in spas and in a pool for wading or therapy; and];

[(d) Total bromine in combination with copper and silver ions shall be between:]

[(i)] (v) In pools for swimming and diving and water recreational attractions, total bromine in combination with copper and silver ions shall be between [1.0] 1 ppm and [8.0] 8 ppm in pools for swimming and diving and water recreational attractions,] 10 ppm; and

[(ii)] (vi) *In spas, pools for wading or therapy, and public spray grounds, total bromine in combination with copper and silver ions shall be between [3.0] 3 ppm and [8.0 ppm in spas and pools for wading or therapy] 10 ppm;*

[(5)] (b) For [pools and spas] *aquatic venues* using an ozone generator, the maximum amount of ozone measured 2 inches [above] below the water surface shall be 0.1 ppm;

[(6)] (c) For [pools] *an aquatic venue* using PHMB, the minimum level of PHMB shall be 30 ppm; and

[(7)] (d) For [pools and spas] *an aquatic venue* using an ultraviolet light/hydrogen peroxide system, the minimum level of hydrogen peroxide shall be 20 ppm.

B. An owner or operator shall ensure that for [public pools and spas] *an aquatic venue* using cyanuric acid or a similar chlorine stabilizer, the cyanuric acid or similar chlorine stabilizer is maintained [between 30 ppm and 100] *at less than 50 ppm*.

C. An owner or operator of [a public pool or spa] *an aquatic venue* may not use:

(1) PHMB in [a pool or spa] *an aquatic venue* that uses jets or sprays;

(2) PHMB in conjunction with [any]:

(a) Any halogen compound [or ozone]; or

(b) Ozone;

(3) Cyanuric acid in conjunction with [a]:

(a) A bromine compound [or in]; or

(b) At an indoor [pool or spa] *aquatic venue*; or

(4) (text unchanged)

**.45 Water Chemistry of [a Pool and Spa] *an Aquatic Venue*.**

A. An owner or operator shall ensure that the water chemistry of [a public pool or spa] *an aquatic venue* is maintained according to the following requirements:

(1)—(2) (text unchanged)

(3) [The] *Except for spas*, calcium hardness of the water is maintained between 150 ppm and [400] *1,000 ppm*;

(4) [The Langelier Saturation Index of the water is maintained between -0.5 and +0.5 as calculated by:] *For spas, calcium harness of the water is maintained between 100 ppm and 800 ppm;*

(5) *The Langelier Saturation Index of the water is maintained between -0.3 and +0.5 as calculated by:*

(a) The Langelier Saturation Index formula:  $Langelier\ Saturation\ Index = pH + TF + CF + AF - [12.1\ where:\ TF = temperature\ factor,$  CF = calcium hardness factor, and AF = alkalinity factor, and] *TDSF; and*

[(b) The following factor table:

Temperature (°F)	Temperature Factor	Calcium Hardness (ppm)	Calcium Factor	Total Alkalinity (ppm)	Alkalinity Factor
32	0.0	5	0.3	5	0.7
37	0.1	25	1.0	25	1.4
46	0.2	50	1.3	50	1.7
53	0.3	75	1.5	75	1.9
60	0.4	100	1.6	100	2.0
66	0.5	150	1.8	150	2.2
76	0.6	200	1.9	200	2.3
84	0.7	300	2.1	300	2.5
94	0.8	400	2.2	400	2.6
105	0.9	800	2.5	800	2.9
128	1.0	1000	2.6	1000	3.0]

(b) *The following factor table:*

Temperature (°F)	Temperature Factor	Calcium Hardness (ppm)	Calcium Factor	Total Alkalinity (ppm)	Alkalinity Factor	Total Dissolved Solids (ppm)	Total Dissolved Solids Factor
32	0.0	5	0.3	5	0.7	<1000	12.10
37	0.1	25	1.0	25	1.4	1000—1999	12.19
46	0.2	50	1.3	50	1.7	2000—2999	12.29
53	0.3	75	1.5	75	1.9	3000—3999	12.35
60	0.4	100	1.6	100	2.0	4000—4999	12.41
66	0.5	150	1.8	150	2.2	5000—5999	12.44
76	0.6	200	1.9	200	2.3	—	—
84	0.7	300	2.1	300	2.5	—	—
94	0.8	400	2.2	400	2.6	—	—
105	0.9	800	2.5	800	2.9	—	—
128	1.0	1000	2.6	1000	3.0	—	—

[(5)] (6) [The] *Except for an aquatic venue utilizing an electrolytic chlorine generator, the amount of total dissolved solids is maintained so that it does not exceed 1,500 ppm[, except for a salt water pool where the total dissolved solids may not exceed 3,000 ppm];*

(7) *For an aquatic venue utilizing an electrolytic chlorine generator, the amount of total dissolved solids is maintained so that it does not exceed 1,500 ppm above the starting value of the total dissolved solids as documented on the aquatic venue's data sheet for the aquatic venue when balanced; and*

(8) *The starting value of the total dissolved solids for the aquatic venue is updated whenever the aquatic venue is drained and filled;*

[(6)] (9) The amount of dissolved metals is maintained so that it does not exceed the following levels:

(a) Iron, 0.3 ppm[.];

(b) Manganese, 0.3 ppm[.]; and

(c) Copper, 1.3 ppm; and

[(7)] (10) The water clarity is maintained so that either a 6 inch seechi disc placed in the deepest part of [a pool or spa] *an aquatic venue* or the main drain is clearly visible and sharply defined when observed from the side of [the pool or spa] *an aquatic venue*.

B. An owner or operator shall ensure that:

(1) (text unchanged)

(2) When chemicals are added directly to [a pool or spa] *an aquatic venue*, no one is allowed in the water *during dispersion* or until the chemicals are dissolved and diffused throughout [the pool or spa] *an aquatic venue*.

C. An owner or operator shall ensure that the water temperature for a *mechanically* heated [public pool or spa does not exceed] *aquatic venue does not exceed:*

(1) 88°F for a pool *or spray ground*;

(2) (text unchanged)

(3) 96°F for a therapy pool *or for a pool meeting the turnover rate for a therapy pool as required by Regulation .25B and the disinfection of a therapy pool as required by Regulation .44 of this chapter.*

#### **.46 Operating Records Required.**

An *aquatic venue* operator shall maintain operating records on a form provided by the Secretary or an equivalent form and shall:

A. Except as provided in §B of this regulation, record the information required [in] *by:*

(1) §C(1)—(3) of this regulation in:

(a) 2[-] hour intervals for a recreational pool [and for a], public spa, [and three] *or public spray ground beginning before opening; or*

(b) *Intervals no less than 2 hours and no more than 4 hours apart* [times per day] for a limited public-use [and] pool, *or semipublic pool beginning before opening; and* [record the information required in]

(2) [§C(4)—(9)] §C(4)—(10) of this regulation [a minimum of three times per day for a public pool and spa,] *in intervals no less than 2 hours and no more than 4 hours apart for an aquatic venue beginning* [1/2 hour before] *before opening;*

B. For [a public pool or spa] *an aquatic venue* where an approved automatic controller is used, record the information required [in] *by* §C of this regulation:

[(1)] A minimum of three times per day in conformance with the following schedule:

(a) The first recording of the day shall be made 1/2 hour before the pool or spa opens,

(b) The second recording shall be completed between 12 p.m. and 2 p.m., and

(c) The final recording shall be completed 2 hours before closing]

(1) *In intervals no less than 2 hours and no more than 4 hours apart; and*

(2) (text unchanged)

C. Record the following information in the intervals required [in] *by* §§A and B of this regulation:

(1) Disinfectant residual *in ppm*;

(2) Combined chlorine level *in ppm*, if chlorine is used;

(3)—(4) (text unchanged)

(5) Water temperature *in degrees Fahrenheit*, if heated;

(6) Flow rate *in gpm*;

(7) Filter influent pressure and effluent pressure *in PSI*;

(8) Pump vacuum *in PSI*; [and]

(9) Total number of bathers; *and*

(10) *If the aquatic venue is equipped with an automatic controller, ORP and pH readings from the automatic controller;*

D. Record in [1-week] *1 week* intervals for a public pool and in [1-day] *1 day* intervals for a public spa *or spray ground:*

(1) Total alkalinity level *in ppm*;

(2) Calcium hardness level *in ppm*; and

(3) Cyanuric acid level *in ppm*, if used;

- E. Record daily for [a public pool or spa] *an aquatic venue*:
- (1) (text unchanged)
  - (2) An injury or accident at [the pool or spa] *an aquatic venue*;
  - (3) Chemicals added to the water; [and]
  - (4) *For a spa*:
    - (a) *The water replacement interval*;
    - (b) *The interval between the last water change*; and
    - (c) *The difference between the water replacement interval and the interval between the last water change*; and
  - [(4)] (5) (text unchanged)
- F. Date and sign each record sheet *and initial each entry*;
- G. [Record] *Each day before opening the aquatic venue record* the results of the following inspections [in the specified intervals] to complete [a Pool and Spa Entrapment] *an Aquatic Venue Hazards Checklist*:
- (1) Daily check before the facility is open to verify that:
    - (a) Drain covers, vacuum fitting covers, skimmer equalizer covers, and any other suction outlet covers are in place, secure, and unbroken,
    - (b) Skimmer baskets, weirs, lids, flow adjusters, and suction outlet lines are free of any blockage,
    - (c) Inlet and return covers or fittings are in place, secure, and unbroken,
    - (d) Safety warning signs are in place around the pool or spa, including emergency instructions and phone numbers, and
    - (e) On/off switches for pumps are clearly labeled and the location of the pumps is clearly identified; and
  - (2) Check all information required in §G(1) of this regulation before filling a pool or spa with water, after periodic maintenance, and after pool or filter cleaning procedures;]
    - (1) *Suction outlet covers are*:
      - (a) *Secure*; and
      - (b) *Free from breaks, cracks, or defects*;
    - (2) *Skimmers are*:
      - (a) *Free from any blockage*; and
      - (b) *Equipped with*:
        - (i) *Secure lids*; and
        - (ii) *Functioning weirs*;
    - (3) *Inlet and return covers are*:
      - (a) *In place*;
      - (b) *Secure*; and
      - (c) *Unbroken*;
    - (4) *Warning signs are in place*;
    - (5) *The on/off switch to each pump is clearly labeled*;
    - (6) *If an aquatic venue is equipped with a suction vacuum release system, that the suction vacuum release system releases suction when tested*;
    - (7) *The circulation pump is running*;
    - (8) *The flow rate for the aquatic venue is between the minimum and maximum turnover rate*; and
    - (9) *The certified operator has verified compliance and signed or initialed the checklist*.
- H. Keep the records on [the premises] *file* for a minimum of 3 years; and
- I. (text unchanged)

#### **.47 Test Kits.**

- A. In order to comply with the requirements of Regulation .46 of this chapter, an owner shall ensure that:
- (1) One or more of the following for measuring the disinfectant level is used:
    - (a) A chlorine or bromine test kit that is the DPD [(diethyl-p-phenylene diamine)] reagent system for measuring free and combined chlorine or total bromine with an indicator range from 0.0 to 10.0 ppm or with procedures for performing a dilution test to achieve readings up to 10.0 ppm[.];
    - (b) An ozone test kit that is the indigo trisulfonate method for measuring ozone with an indicator range from [0.0] 0 to [1.0] 1 ppm[.];
    - (c) A copper test kit that is accurate to within +/- 0.1 ppm for measuring copper[.];
    - (d) A PHMB test kit with an indicator range from [0.0] 0 ppm to 75 ppm[.]; or
    - (e) A hydrogen peroxide test kit that is the DPD reagent system with an indicator range from [0.0] 0 to 40 ppm;
  - (2)—(3) (text unchanged)
  - (4) An EDTA [(ethylenediamine-tetraacetate)] hardness test is used to measure calcium hardness as milligrams per liter calcium carbonate; and
  - (5) A cyanuric acid test kit with an indicator range from 0 to 100 ppm is used if cyanuric acid is used in the pool [or], spa, or spray ground.
- B. In order to comply with the requirements of Regulation .46 of this chapter, an owner may monitor:

(1) Chlorine and bromine residuals by measuring the [oxidation-reduction potential (ORP)] *ORP* of the water before the disinfectant injection point; and

(2) (text unchanged)

C. If an ORP or pH meter is used, an owner shall ensure that:

(1) Periodic calibration is performed on these instruments to assure accurate measurements; [and]

(2) *Documentation of calibrations are:*

(a) *Kept on file for 3 years; and*

(b) *Made available to the Department upon request; and*

(3) (text unchanged)

#### **.48 Sanitary Quality of Water.**

A. Although routine testing is not required, an owner *or operator* shall ensure that the water in [a public pool or spa] *an aquatic venue:*

[A.] (1) Has a coliform bacteria level of less than 1 coliform per milliliter; [and]

[B.] (2) Is free of pathogenic organisms[.]; *and*

(3) *Is tested after a fecal or vomit incident.*

B. An owner *or operator* shall:

(1) *Contact either the local health department or a Maryland certified laboratory to perform bacteriological testing of the water in an aquatic venue within 72 hours of completing the requirements in Regulation .48-1 of this chapter;*

(2) *Ensure that four samples of the water in an aquatic venue are collected from various points around the aquatic venue, including the general area where the incident occurred;*

(3) *Provide the results of the bacteriological tests to the local health department within 24 hours of receipt if the samples were not taken by the local health department; and*

(4) *Immediately close the aquatic venue and repeat the requirements in Regulation .48-1 of this chapter if any sample has a coliform bacteria level that does not meet the requirements in §A(1)—(2) of this regulation.*

C. *The Secretary may perform bacteriological testing of the water in an aquatic venue at any time the aquatic venue is in operation.*

D. *If the Secretary determines that the water in an aquatic venue does not meet the requirements in §A(1)—(2) of this regulation, the owner or operator shall immediately close the aquatic venue and perform the requirements in Regulation .48-1A of this chapter.*

E. *The owner or operator may not operate the aquatic venue until compliance with §A(1)—(2) of this regulation is achieved.*

#### **.48-1 Fecal, Vomit, and Blood Incident Response at an Aquatic Venue**

*An owner or operator of an aquatic venue where:*

A. A fecal or vomit incident has occurred shall:

(1) *Immediately close the aquatic venue, and have patrons exit the venue;*

(2) *Remove as much of the fecal material or vomit as possible and dispose of it in a sanitary manner;*

(3) *Clean and disinfect the items used to remove the fecal material or vomit;*

(4) *Ensure pH is maintained at 7.5 or less;*

(5) *Ensure that the temperature is maintained at 77°F or higher;*

(6) *For a formed-stool fecal or vomit incident, maintain the free chlorine level at:*

(a) *1 ppm for 45 minutes;*

(b) *2 ppm for 23 minutes;*

(c) *3 ppm for 15 minutes;*

(d) *4 ppm for 11 minutes;*

(e) *5 ppm for 9 minutes;*

(f) *6 ppm for 8 minutes;*

(g) *7 to 8 ppm for 6 minutes; or*

(h) *9 to 10 ppm for 5 minutes;*

(7) *For a diarrheal fecal incident, maintain the free chlorine level at:*

(a) *10 ppm for 25.5 hours;*

(b) *15 ppm for 17 hours;*

(c) *20 ppm for 13 hours;*

(d) *25 ppm for 10.5 hours;*

(e) *30 ppm for 8.5 hours;*

(f) *35 ppm for 7.5 hours;*

(g) *40 ppm for 6.5 hours;*

(h) *45 ppm for 6 hours;*

(i) *50 ppm for 5.5 hours; or*

(j) *55 ppm for 5 hours;*

(8) Record the incident in the Fecal, Vomit, and Blood Incident Response log as required by Regulation .51 of this chapter; and

(9) Test the water in the aquatic venue as required by Regulation .48 of this chapter; and

B. A blood incident has occurred shall:

(1) Immediately clean and disinfect the area around the aquatic venue contaminated by blood, utilizing the blood borne pathogen control kit required by Regulation .40 of this chapter;

(2) Measure the disinfectant level in the aquatic venue water to ensure it is compliant with Regulation .44 of this chapter; and

(3) Record the incident in the Fecal, Vomit, and Blood Incident Response log as required by Regulation .51 of this chapter.

#### **.48-2 Water Replacement.**

A. An operator of a public spa shall replace the entire volume of water within the public spa when the difference between the interval since the last water change and the WRI, as calculated according to §B of this regulation, is less than or equal to zero.

B. Water Replacement Interval.

WRI (days rounded to the nearest whole number) =  $(1/3) \times (\text{spa volume in gallons}) / (\text{number of bathers since last water change})$ .

C. Water loss due to evaporation may not be counted as water drained and replaced to meet the requirements of §A or B of this regulation.

#### **.49 Chemical Handling and Storage.**

An owner shall ensure that a:

A. [Material safety] Safety data sheet for [a potentially hazardous] each chemical used at an aquatic venue is [available]:

(1) Available to the operator;

(2) Maintained within:

(a) A water proof cover; and

(b) A 3 ring binder; and

(3) Is current;

B. Chemical is handled, used, stored, and disposed of in accordance with the [material] safety data sheet and all applicable federal, State, and local codes; [and]

C. Chemical is stored in a chemical storage area which is in compliance with Regulation .29 of this chapter[.]; and

D. An owner shall ensure that:

(1) An operator is provided with the:

(a) Personal protective equipment listed in the safety data sheet for each chemical used at the aquatic venue; and

(b) Training necessary to properly use the personal protective equipment listed in the safety data sheet for each chemical used at the aquatic venue; and

(2) Personal protective equipment required by §D(1) of this regulation is maintained at the aquatic venue.

#### **.50 Control of Infectious and Contagious Diseases.**

A. An owner may not knowingly permit an individual to enter the water of [a public pool or spa] an aquatic venue who has:

(1)—(3) (text unchanged)

B. An owner or operator may not prohibit an individual from entering the water of [a public pool or spa] an aquatic venue if a physician certifies that the individual's condition is not infectious or contagious by waterborne transmission.

#### **.51 [Injury and Illness] Aquatic Venue Incident Reports.**

[A public pool or spa] An owner of an aquatic venue shall ensure that:

A. An [injury, drowning, near drowning, or suction entrapment] incident occurring at [a pool or spa] an aquatic venue that results in death or that requires resuscitation or admission to a hospital is reported to the Secretary within 24 hours of the incident on the Aquatic Venue Incident Report Form;

B. [A waterborne] An illness contracted at [a pool or spa] an aquatic venue is reported to the Secretary within 24 hours of the owner's or operator's knowledge of the incident on the Aquatic Venue Incident Report Form;

C. [A water rescue] Water rescues by aquatic safety personnel [is] are reported to the Secretary every 3 months during operation or at the seasonal closure of [the facility] an aquatic venue, whichever is more frequent [; and], on the Aquatic Venue Incident Report Form;

D. The information required [in A----C] by §§A—C of this regulation is [recorded on a pool and spa injury and illness report form provided by the Secretary] recorded on the Aquatic Venue Incident Report Form which shall include:

(1) The name of aquatic venue;

(2) The physical address of the aquatic venue;

- (3) *The name of the owner of the aquatic venue;*
- (4) *The mailing address of the owner of the aquatic venue;*
- (5) *The phone number of the owner of the aquatic venue;*
- (6) *The name of the aquatic venue management company, if applicable;*
- (7) *The license classification of the aquatic venue;*
- (8) *The type of aquatic venue;*
- (9) *The type of use;*
- (10) *The date and time of the incident;*
- (11) *The type of incident;*
- (12) *Who the victim was treated by on-site;*
- (13) *Whether cardiopulmonary resuscitation was required;*
- (14) *Who performed the resuscitation, if applicable;*
- (15) *Whether an automated external defibrillator was used;*
- (16) *Whether the victim was admitted to the hospital;*
- (17) *The name of the hospital, if applicable;*
- (18) *Whether the incident resulted in death;*
- (19) *The date and time of death, if applicable;*
- (20) *The emergency response units and associated report numbers;*
- (21) *Whether a certified aquatic venue operator was present during the incident;*
- (22) *Whether a lifeguard was present during the incident;*
- (23) *The number of lifeguards present, if lifeguards were on duty;*
- (24) *An attached aquatic venue:*
  - (a) *Diagram showing the locations of the victim;*
  - (b) *Diagram showing the location of each lifeguard, if applicable;*
  - (c) *Supervision plan;*
  - (d) *List of house rules;*
  - (e) *Emergency plan;*
  - (f) *Lifeguard certification; and*
  - (g) *Certified aquatic venue operator card;*
- (25) *The State or local agencies notified;*
- (26) *The date and time the State or local agency was notified;*
- (27) *The name of the person that was notified, if notification occurred by telephone;*
- (28) *The signature of the owner or operator completing the form;*
- (29) *The printed name of the owner or operator completing the form;*
- (30) *The phone number of the owner or operator completing the form;*
- (31) *The email address of the owner or operator completing the form; and*
- (32) *The fax number of the owner or operator completing the form; and*

*E. All fecal, vomit or blood incidents that occur at an aquatic venue are recorded in the Fecal, Vomit, Blood Incident Response log which shall include:*

- (1) *Date of the incident;*
- (2) *The time of the incident;*
- (3) *Levels for the following before treating the water at the aquatic venue:*
  - (a) *Free chlorine residual in ppm;*
  - (b) *pH; and*
  - (c) *Temperature in degrees Fahrenheit;*
- (4) *Levels for the following at the halfway point for treating the water at the aquatic venue:*
  - (a) *Free chlorine residual in ppm;*
  - (b) *pH; and*
  - (c) *Temperature in degrees Fahrenheit;*
- (5) *Levels for the following at the end of treating the water at the aquatic venue:*
  - (a) *Free chlorine residual in ppm;*
  - (b) *pH; and*
  - (c) *Temperature in degrees Fahrenheit;*
- (6) *Date bacteriological samples were taken; and*
- (7) *The four locations where the bacteriological samples were taken from within the aquatic venue.*

**.52 Standardization and Audits of Local Health Departments.**

*A. The Department shall:*

- (1) *Standardize one local standardization officer related to the enforcement of this chapter for each local health department;*
- (2) *Audit local health department aquatic venue programs related to the enforcement of this chapter once every four years according to the current audit protocols; and*

(3) Provide to the local health department an aquatic venue program review final report.

B. Local health departments shall submit to the Department responses to any deficiencies within the aquatic venue program as identified within the aquatic venue program review final report within 30 business days of receipt of the report.

**.53 Variances.**

A. (text unchanged)

B. An owner may request a variance from a requirement of this chapter by submitting a written application that:

(1)—(5) (text unchanged)

(6) Demonstrates that the alternative procedure proposed:

(a) Meets or produces the intended effect of the regulation for which the variance is requested[.]; and

(b) (text unchanged)

C. Upon consideration of an application for a variance, the Secretary may grant the request for a variance if the:

(1)—(3) (text unchanged)

(4) Secretary determines that the alternative procedure proposed by the applicant:

(a) Meets or produces the intended effect of the regulation[.]; and

(b) (text unchanged)

D. The Secretary shall grant or deny an application for a variance in writing and shall mail the decision to the applicant within 60 *business* days of the date the application for a variance is received by the Department.

E. If the determination of the Secretary is to deny a variance request that has been made in compliance with the provisions of §B of this regulation, the applicant may file an appeal of the denial in accordance with State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland, and shall contact the Secretary within 10 *calendar* days of receipt of the denial to preserve a right to a hearing.

F. A local health department that issues or denies a variance under the authority of the Secretary shall mail a copy of the variance application and response to the Department within 60 business days of the date the application for a variance is received by the local health department.

**.54 Compliance Schedules.**

A. The owner of [a public pool or, spa] *an aquatic venue* that has a structure, equipment, or appurtenance that is not in compliance with this chapter as determined by the Secretary may submit to the Secretary for approval a compliance schedule for meeting the requirements of this chapter.

B. The request from an owner for approval of a compliance schedule shall include:

(1) The reason that the [noncompliance] *noncompliant* item cannot be immediately corrected;

(2) The plan for correction of the [noncompliance] *noncompliant* item; and

(3) The time schedule for the correction of the [noncompliance] *noncompliant* item.

C. The Secretary may approve the compliance schedule if the:

(1) (text unchanged)

(2) Time schedule for the correction of the [noncompliance] *noncompliant* item is accepted by the Secretary; and

(3) Operation of [the pool or, spa] *an aquatic venue* during the time allowed to bring the [pool or, spa] *aquatic venue* into compliance does not adversely affect the health and safety of the public.

D. The Secretary may not approve a compliance schedule for a newly constructed [pool or, spa] *aquatic venue* that has not received construction approval under Regulation .08 of this chapter.

E. The Secretary shall issue an operating permit or shall refrain from suspending an operating permit to an owner if:

(1) A compliance schedule has been approved by the Secretary for the correction of a [noncompliance] *noncompliant* item;

(2) (text unchanged)

(3) [The pool or, spa] *An aquatic venue* is otherwise in compliance with this chapter.

F. A local health department that issues or denies a compliance schedule under the authority of the Secretary shall mail a copy of the compliance schedule application and response to the Department within 60 business days of the date the application for a compliance schedule is received by the local health department.

**.55 Bonding.**

A. An owner shall ensure that once every 5 years a licensed electrician:

(1) Tests all metal and electrical equipment connected with the aquatic venue;

(2) Signs a bonding certification affidavit; and

(3) Submits the bonding certification affidavit to the Department before the previous bonding certification affidavit expiring.

B. A bonding certification affidavit shall be valid for 5 years from the date signed by the licensed electrician.

VAN T. MITCHELL  
Secretary of Health and Mental Hygiene