CLAY COUNTY

PUBLIC HEALTH CENTER

Rules and Regulations Relating to Swimming Pools, Spas and Similar Facilities

for

Clay County, Missouri

REVISED: December 20, 2018
EFFECTIVE: January 1, 2019

Clay County Public Health Center
Environmental Health Protection
800 Haines Drive
Liberty, MO 64068

RULES AND REGULATIONS RELATING TO SWIMMING POOLS, SPAS AND SIMILAR FACILITIES FOR CLAY COUNTY MISSOURI

Title & Scope

TITLE – These regulations shall be known as the Rules & Regulations Relating to Swimming Pools, Spas and Similar Facilities in the county of Clay, may be cited, and will be referred to hereinafter as Regulations.

SCOPE – The provisions of these regulations shall apply to all swimming POOLS, SPAS and similar facilities classified as Category I through V. The purpose of these regulations shall be to establish a guide for the operation and maintenance of such POOLS, SPAS and similar recreational water facilities so that hazards to public health and safety shall be minimized.

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Definitions:

AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADA): 2010 ADA Standards for Accessible Design

AIR HANDLING SYSTEM: equipment that brings in outdoor air into a building and removes air from a building for the purpose of introducing air with fewer contaminants and removing air with contaminants created while BATHERS are using AQUATIC VENUES. The system contains components that move and condition the air for temperature, humidity, and pressure control, and transport and distribute the air to prevent condensation, corrosion, and stratification, provide acceptable indoor air quality, and deliver outside air to the breathing zone.

AQUATIC FACILITY: a physical place that contains one or more AQUATIC VENUES and support infrastructure.

AQUATIC FEATURE: an individual component within an AQUATIC VENUE. Examples include SLIDES, structures designed to be climbed or walked across, and structures that create falling or shooting water.

AQUATIC VENUE: an artificially constructed structure or modified natural structures where the general public is exposed to water intended for recreational or therapeutic purpose. Such structures do not necessarily contain standing water, so water exposure may occur via contact, ingestion, or aerosolization. Examples include swimming POOLS, wave POOLS, lazy rivers, SURF POOLS, SPAS (including SPA POOLS and hot tubs), THERAPY POOLS, water SLIDE landing POOLS, SPRAY GROUNDS, and other interactive water venues, where more than one feature is present.

AUTHORITY HAVING JURISDICTION (AHJ): The Clay County Public Health Center, the agency responsible for enforcing the requirements of this regulation, and for approving equipment, materials, installations, or procedures.

BACKFLOW: a hydraulic condition caused by a difference in water pressure that causes an undesirable reversal of the flow as the result of a higher pressure in the system than in its supply.

BARRIER: an obstacle intended to prevent direct access from one point to another.

BATHER: a person at an AQUATIC VENUE who has contact with water either through spray or partial or total immersion. The term BATHER as defined, also includes staff members, and refers to those users who can be exposed to contaminated water as well as potentially contaminate the water.

CHLORINE: an element that at room temperature and pressure is a heavy greenish yellow gas with a characteristic penetrating and irritating smell; it is extremely toxic. It can be compressed in liquid form and stored in heavy steel tanks. When mixed with water, CHLORINE gas forms hypochlorous acid (HOCl), the primary CHLORINE-based disinfecting agent, hypochlorite ion, and hydrochloric acid. HOCl dissociation to hypochlorite ion is highly pH dependent. CHLORINE is a general term which refers to HOCl and hypochlorite ion in aqueous solution derived from CHLORINE gas or a variety of CHLORINE-based disinfecting agents.

- **AVAILABLE CHLORINE:** the amount of CHLORINE in the +1 oxidation state, which is the reactive, oxidized form. In contrast, chloride ion (Cl^-) is in the -1 oxidation state, which is the inert, reduced state. AVAILABLE CHLORINE is subdivided into FREE AVAILABLE CHLORINE and

Combined AVAILABLE CHLORINE. POOL chemicals containing AVAILABLE CHLORINE are both oxidizers and disinfectants. Elemental CHLORINE (Cl_2) is defined as containing 100% AVAILABLE CHLORINE. The concentration of AVAILABLE CHLORINE in water is normally reported as Mg/L (ppm) "as Cl_2", that is, the concentration is measured on a Cl_2 basis, regardless of the source of the AVAILABLE CHLORINE.

- **FREE AVAILABLE CHLORINE:** the portion of the total AVAILABLE CHLORINE that is not "combined CHLORINE" and is present as HOCl or hypochlorite ion (OCl^-). The pH of the water determines the relative amounts of HOCl and hypochlorite ion. HOCl is a very effective bactericide and is the active bactericide in POOL water. OCl^- is also a bactericide but acts more slowly than HOCl. Thus, CHLORINE is a more effective bactericide at low pH than at high pH. A free CHLORINE residual must be maintained for adequate DISINFECTION.

CODE: means a systematic statement of a body of law, especially one given statutory force.

CONTAMINATION RESPONSE PLAN: a plan for handling contamination from formed stool, diarrheal-stool, vomit, and blood.

CROSS CONNECTION: a connection or arrangement, physical or otherwise, between a potable water supply system and a PLUMBING FIXTURE, tank, receptor, equipment, or device, through which it may be possible for non-potable, used, unclean, polluted and contaminated water, or other substances to enter into a part of such potable water system under any condition.

CT INACTIVATION VALUE: a representation of the concentration of the disinfectant (C) multiplied by time in minutes (T) needed for inactivation of a contaminant. The concentration and time are inversely proportional; therefore, the higher the concentration of the disinfectant, the shorter the contact time required for inactivation. The CT Value can vary with pH or temperature change, so these values must also be supplied to allow comparison between values.

CYA: Cyanuric acid.

DECK: means surface areas serving the AQUATIC VENUE, including the DRY DECK, PERIMETER DECK, and POOL DECK.

- **DRY DECK**: means all pedestrian surface areas within the aquatic venue enclosure not subject to frequent splashing or constant wet foot traffic. The dry deck is not perimeter deck or pool deck, which connect the pool to adjacent amenities, entrances, and exits. Landscape areas are not included in this definition.
- **PERIMETER DECK**: means the hardscape surface area immediately adjacent to and within 4 feet (1.2 m) of the edge of the swimming pool also known as the "wet deck" area.
- **POOL DECK**: means surface areas serving the aquatic venue, beyond perimeter deck, which is expected to be regularly trafficked and made wet by bathers.

DIAPER CHANGING STATION: a hygiene station that includes a diaper-changing unit, hand-washing sink, soap and dispenser, a means for drying hands, trash receptacle, and disinfectant products to clean after use.

DISINFECTION: a treatment that kills or irreversibly inactivates microorganisms (e.g., bacteria, viruses, and parasites); in water treatment, a chemical (commonly CHLORINE, chloramine, or ozone) or physical process (e.g., ultraviolet radiation) can be used.

DISINFECTION BY-PRODUCT: a chemical compound formed by the reaction of a disinfectant (e.g. CHLORINE) with a precursor (e.g. natural organic matter, nitrogenous waste from BATHERS) in a water system (POOL, water supply).

EMERGENCY ACTION PLAN: a plan that identifies the objectives that need to be met for a specific type of emergency, who will respond, what each person's role will be during the response. and what equipment is required as part of the response.

ENCLOSURE: an uninterrupted constructed feature or obstacle used to surround and secure an area that is intended to deter or effectively prevent unpermitted, uncontrolled, and unfettered access. It is designed to resist climbing and to prevent passage through it and under it. ENCLOSURE can apply to aquatic facilities or AQUATIC VENUES.

GROUND FAULT CIRCUIT INTERRUPTER (GFCI): a device for protection of personnel that deenergizes an electrical circuit or portion thereof in the event of excessive ground current.

HAND WASH STATION: a location which has a hand wash sink, adjacent soap with dispenser, hand drying device or paper towels and dispenser, and trash receptacle.

HEALTH DIRECTOR: The Director of Clay County Public Health Center and his/her designee.

HOT WATER: means an AQUATIC VENUE with water temperature over 90 degrees Fahrenheit (30 degrees Celsius).

HYGIENE FACILITIES: a structure that contains toilet, SHOWER, diaper-changing unit, HAND WASH STATION, and dressing capabilities serving BATHERS and PATRONs at an AQUATIC FACILITY.

IMMINENT HEALTH HAZARD: means a significant threat or danger to health that is considered to exist when there is evidence sufficient to show that a product, practice, circumstance, or event creates a situation that requires immediate correction or cessation of operation to prevent injury based on the number of potential injuries and the nature, severity, and duration of the anticipated injury or illness.

INCREASED RISK AQUATICS VENUE: means an AQUATIC VENUE which due to its intrinsic characteristics and intended users has a greater likelihood of affecting the health of the BATHERS of that venue by being at increased risk for microbial contamination (e.g., by children less than 5 years old) or being used by people that may be more susceptible to infection (e.g., therapy patients with open wounds). Examples of increased-risk AQUATIC VENUES include SPRAY GROUNDs, WADING POOLS and other AQUATIC VENUES designed for children less than 5 years old as well as THERAPY POOLS.

INDOOR AQUATIC FACILITY: a physical place that contains one or more AQUATIC VENUES and the surrounding BATHER and spectator/stadium seating areas within a structure that meets the definition of "Building" per the 2012 International Building CODE (IBC). It does not include equipment, chemical STORAGE, or BATHER hygiene rooms or any other rooms with a direct opening to the AQUATIC FACILITY.

INFINITY EDGE: a POOL wall structure and adjacent perimeter DECK that is designed in such a way where the top of the POOL wall and adjacent DECK are not visible from certain vantage points in the POOL or from the opposite side of the POOL. Water from the POOL flows over the edge and is captured and treated for reuse through the normal POOL filtration system.

INLET: wall or floor fittings where treated water is returned to the POOL.

Mg/L: milligrams per liter and is the equivalent metric measure to parts per million (ppm).

MONITOR: the regular and purposeful observation and checking of systems or facilities and recording of data, including system alerts, excursions from acceptable ranges, and other facility issues. Monitoring includes human or electronic means.

NATIONAL ELECTRIC CODE (NEC): NFPA 70: National Electric Code (NEC), 2017 Edition

NO DIVING MARKER: a sign with the words “No Diving” and the universal international symbol for “No Diving” pictured as an image of a diver with a red circle with a slash through it.

OOCYST: means the thick-walled, environmentally resistant structure released in the feces of infected animals that serves to transfer the infectious stages of sporozoan parasites (e.g., Cryptosporidium) to new hosts.

PATRON: a BATHER or other person or occupant at an AQUATIC FACILITY who may or may not have contact with AQUATIC VENUE water either through partial or total immersion. PATRONS may not have contact with AQUATIC VENUE water but could still be exposed to potential contamination from the AQUATIC FACILITY air, surfaces, or aerosols.

PERIMETER GUTTER SYSTEM: the alternative to SKIMMERS as a method to remove water from the POOL surface for treatment. The gutter provides a level structure along the POOL perimeter versus intermittent SKIMMERS.

PLUMBING FIXTURE: a receptacle, fixture, or device that is connected to a water supply system or discharges to a drainage system or both and may be used for the distribution and use of water; for example: toilets, urinals, SHOWERS, and hose bibs. Such receptacles, fixtures, or devices require a supply of water; or discharge liquid waste or liquid-borne solid waste; or require a supply of water and discharge waste to a drainage system.

pH: the negative log of the concentration of hydrogen ions. When water ionizes, it produces hydrogen ions (H+) and hydroxide ions (OH-). If there is an excess of hydrogen ions the water is acidic. If there is an excess of hydroxide ions the water is basic. pH ranges from 0 to 14. Pure water has a pH of 7.0. If pH is higher than 7.0, the water is said to be basic, or alkaline. If the water’s pH is lower than 7.0, the water is acidic. As pH is raised, more HOCl ionization occurs and CHLORINE disinfectants decrease in effectiveness.

POINT OF TRANSITION: Area of the floor of the swimming POOL where an abrupt change in slope occurs between the shallow and deep AREAS of the swimming POOLS.

POOL: a subset of AQUATIC VENUES designed to have standing water for total or partial BATHER immersion. This does not include SPAS.

- **ACTIVITY POOL:** a water attraction that is designed primarily for play activity that uses constructed features and devices for pad walks, flotation devices, and similar attractions.
- **DIVING POOL:** POOL used exclusively for diving.
- **SURF POOL:** any POOL designed to generate waves dedicated to the activity of surfing on a surfboard or analogous surfing device commonly used in the ocean and intended for sport as opposed to general play intent as in wave POOLS.
- **THERAPY POOL:** a POOL used exclusively for aquatic therapy, physical therapy, and/or rehabilitation to treat a diagnosed injury, illness, or medical condition, wherein the therapy is provided under the direct supervision of a licensed physical therapist, occupational therapist, or athletic trainer. This could include wound patients or immunocompromised patients whose health could be impacted if there is not additional water quality protection.
- **WADING POOL:** any POOL used exclusively for wading and intended for use by young children where the depth does not exceed two feet (0.6 m).

QUALIFIED LIFEGUARD: an individual who has successfully completed an AHJ recognized lifeguard training course offered by a nationally recognized lifeguard training program, holds a current certificate for such training, has met the pre-service requirements, and is participating in continuing in-service training requirements of the AQUATIC FACILITY.

QUALIFIED OPERATOR: an individual responsible for the operation and maintenance of the water and air quality systems and the associated infrastructure of the AQUATIC FACILITY and who has successfully completed an AHJ-recognized operator training course to operate an AQUATIC FACILITY offered by an AHJ-recognized training agency and holds a current certificate for such training.

RECESSED STEPS: a way of ingress/egress for a POOL similar to a ladder but the individual treads are recessed into the POOL wall.

RECIRCULATION SYSTEM: the combination of the main drain, gutter or SKIMMER, INLETs, piping, pumps, controls, surge tank or balance tank to provide POOL water recirculation to and from the POOL and the treatment systems.

ROBOTIC CLEANER: a modular vacuum system consisting of a motor-driven, in-POOL suction device, either self-powered or powered through a low voltage cable, which is connected to a DECK-side power supply.

SAFETY PLAN: means a written document that has procedures, requirements and/or standards related to safety which the aquatic facility staff shall follow. These plans include training, emergency response, and operations procedures.

SATURATION INDEX: a mathematical representation or scale representing the ability of water to deposit calcium carbonate, or dissolve metal, concrete or grout.

SECONDARY DISINFECTION SYSTEM: those DISINFECTION processes or systems installed in addition to the STANDARD systems required on all AQUATIC VENUES, which are required to be used for increased risk AQUATIC VENUES.

SHALLOW AREA: any area of water with a depth of less than five (5) feet.

SHOWER: a device that sprays water on the body.

CLEANSING SHOWER: a SHOWER located within a hygiene facility using warm water and soap. The purpose of these SHOWERS is to remove contaminants including perianal fecal material, sweat, skin cells, personal care products, and dirt before BATHERS enter the AQUATIC VENUE.

RINSE SHOWER: a SHOWER typically located in the POOL DECK area with ambient temperature water. The main purpose is to remove dirt, sand, or organic material prior to entering the AQUATIC VENUE to reduce the introduction of contaminants and the formation of DISINFECTION BY-PRODUCTS.

SKIMMER: a device installed in the POOL wall whose purpose is to remove floating debris and surface water to the filter. They shall include a weir to allow for the automatic adjustment to small changes in water level, maintaining skimming of the surface water.

SLIDE: an AQUATIC FEATURE where users SLIDE down from an elevated height into water.

SPA: a structure intended for either warm or cold water where prolonged exposure is not intended. SPA structures are intended to be used for bathing or other recreational uses and are not usually drained and refilled after each use. It may include, but is not limited to, hydrotherapy, air induction bubbles, and recirculation.

SPRAY GROUND: means any indoor or outdoor installation that includes sprayed, jetted or other water sources contacting bathers and not incorporating standing or captured water as part of the bather activity area. These aquatic venues are also known as splash pads, spray pads, wet DECKS. For the purposes of these regulations, only those designed to recirculate water and intended for public use and recreation shall be regulated.

STANDARD: something established by authority, custom, or general consent as a model or example.

STORAGE: the condition of remaining in one space for one hour or more. Materials in a closed pipe or tube awaiting transfer to another location shall not be considered to be stored.

STRUCTURAL CRACK: a break or split in the POOL surface that weakens the structural integrity of the vessel.

SUBSTANTIAL ALTERATION: means the alteration, modification, or renovation of an aquatic venue (for outdoor aquatic facilities) or indoor aquatic facility (for indoor aquatic facilities) where the total cost of the work exceeds 50% of the replacement cost of the aquatic venue (for outdoor aquatic facilities) or indoor aquatic facility (for indoor aquatic facilities).

SUPERCHLORINATION: the addition of large quantities of CHLORINE-based chemicals to kill algae, destroy odors, or improve the ability to maintain a disinfectant residual. This process is different from HYPERCHLORINATION, which is a prescribed amount to achieve a specific CT INACTIVATION VALUE whereas super-chlorination is the raising of free CHLORINE levels for water quality maintenance.

THEORETICAL PEAK OCCUPANCY: means the anticipated peak number of bathers in an aquatic venue or the anticipated peak number of occupants of the decks of an aquatic facility, as calculated per the

Center for Disease Control and Prevention (CDC) Model Aquatic Health Code section 4.1.2.3.5.3. This is the lower limit of peak occupancy to be used for design purposes for determining services that support occupants. Theoretical peak occupancy is used to determine the number of showers. For aquatic venues, the theoretical peak occupancy is calculated around the type of water use or space.

TURNOVER: the period of time, usually expressed in hours, required to circulate a volume of water equal to the capacity of the AQUATIC VENUE.

WATER REPLENISHMENT SYSTEM: a way to remove water from the POOL as needed and replace with make-up water in order to maintain water quality.

ZERO DEPTH ENTRY: a sloped entry into a POOL from DECK level into the interior of the POOL as a means of access and egress.

Categories of POOLS

Category I Public- Any POOL intended for, or used by, the public for recreational use, owned and operated by any person, firm, corporation, institution, association, club or any government entity.

Category II Semi-Public- Any POOL not open to the public, but open rather to a limited group, such as institutions, schools, child care facilities, resident subdivisions or similar developments, camps, day camps, recreational facilities, or POOLS of similar usage and type. Or any POOL whose use is restricted to residents, members or registered guests, including but not limited to hotels, motels, apartments, trailer parks/mobile home parks, churches and condominiums.

Category III Increased Risk- Any AQUATIC VENUE which due to its intrinsic characteristics and intended users has a greater likelihood of affecting the health of the BATHERS of that venue by being at increased risk for microbial contamination (e.g., by children less than 5 years old) or being used by people that may be more susceptible to infection (e.g., therapy patients with open wounds). This includes THERAPY POOLS, SPRAY GROUNDS, WADING POOLS and other AQUATIC VENUES designed for children less than 5 years old.

Category IV Special AQUATIC VENUE- Any POOL whose design and/or use is significantly different from a swimming POOL. This includes, but is not limited to SURF POOLS, instructional POOLS, DIVING POOLS, and water SLIDES.

Category V SPAS- Hot tubs, SPAS, or whirlpools. Any commercial whirlpool, hot tub, or SPA designed for recreation, or relaxation use, in combination with hydro jet circulation, air induction systems, or other circulation systems using hot, cold, or ambient water temperature. These facilities have a maximum water depth of four (4) feet and are not used for swimming or diving.

Category VI Private- Any swimming POOL, SPA, hot-tub, and whirlpool bath on the premises of a single-family residential dwelling. A Category VI Private pool is not regulated by the AHJ.

1) Plan Submittal

a) A person proposing to construct, renovate or alter a POOL, ancillary facilities or equipment and appurtenances shall submit plans and specifications detailing compliance with this regulation to the AHJ for review and written approval prior to commencing construction and shall first be cleared by the AHJ before substitution if not an exact duplicate of the units being changed or replaced. A local building department shall not issue a permit for a public POOL or ancillary facility until the plans have been approved by Clay County Public Health Center.

b) Existing aquatics venues which are not in compliance with these regulations at the effective date of these regulations shall be exempt from compliance with those construction provisions which do not pertain directly to health and safety of the PATRONS so long as an imminent health or safety hazard does not result. Exclusions for this exemption include: chemical handling 8)(d)(iii) flow rates/TURNOVER 5)(f)(ii), INDOOR AQUATIC FACILITY ventilation 4)(b)(iv), and DIAPER-CHANGING STATIONS 4)(i)(i). Existing swimming POOLS constructed prior to implementation of these regulations may continue in use so long as all imminent health and safety hazards are corrected, as determined by the AHJ. All aquatics venues, when remodeled, shall comply with all applicable provisions of these regulations pertinent to the renovation, unless a variance is granted by the AHJ.

2) Materials

a) Construction Material. AQUATIC VENUES shall be constructed of reinforced concrete or impervious and structurally sound material(s), which provide a smooth, easily cleaned, watertight structure capable of withstanding the anticipated stresses/loads for full and empty conditions taking into consideration climatic, hydrostatic, seismic, and the integration of the AQUATIC VENUE with other structural conditions and as required by applicable CODES.

b) Suitable for intent. All equipment and materials used or proposed for use in AQUATIC FACILITIES shall be suitable for their intended use and be installed in accordance with this regulation, as certified, listed, and labeled to a specific STANDARD by an ANSI-accredited certification organization where applicable, and as specified by the manufacturer.

c) Durability. All materials shall be inert, non-toxic, resistant to corrosion, impervious, enduring, and resistant to damages related to environmental conditions of the installation region.

d) Piping system components in contact with swimming POOL water shall be of non-toxic material, resistant to corrosion, able to withstand operating pressures, chemicals, and temperatures.

e) All steps and diving boards are to be made of non-slip construction or to be covered with non-slip materials.

3) AQUATIC VENUE Structure

a) Bottom Slope

i) In water depths under 5 feet (1.5 m), the slope of the floor of all POOLS shall not exceed 1 foot (30.5 cm) vertical drop for every 12 feet (3.7 m) horizontal.

ii) In water depths 5 foot (1.5 m) and greater, the slope of the floors of all POOLS shall not exceed 1 foot (30.5 cm) vertical to 3 feet (0.9 m) horizontal. *Exception*: POOLS designed and used for competitive diving shall be designed to meet the STANDARDs of the sanctioning organization (such as NFSHSA, NCAA, USA Diving, or FINA).

iii) POOLS shall be designed so that they drain without leaving puddles or trapped standing water.

b) POOL Access/Egress
   i) Each POOL shall have a minimum of two means of access and egress, with one located within 10 feet (3.0 m) of the shallowest end, and one located within 10 feet of the deepest end of the POOL, where applicable, with the exception of:
      (1) Waterslide landing POOLS
      (2) Waterslide runouts
      (3) Wave POOLS
   ii) For POOLS wider than 30 feet (9.1 m), such means of access / egress shall be provided on each side of the POOL and shall not be more than 75 feet (22.9 m) apart.
c) Stairs
   i) Where provided, stairs shall be constructed with slip-resistant materials.
   ii) The leading horizontal and vertical edges of stair treads shall be outlined with a continuous slip-resistant contrasting tile or other permanent marking of not less than 1 inch (25.4 mm) and not greater than 2 inches (50.8 mm).
   iii) Where stairs are provided in POOL water depths greater than 5 feet (1.5 m), they shall be recessed and not protrude into the swimming area of the POOL.
d) Handrails/Grab rails
   i) Handrails shall be provided for each set of stairs. Grab rails shall be provided at both sides of RECESSED STEPS.
   ii) Handrails and grab rails shall be constructed of corrosion-resistant materials and anchored securely.
   iii) The upper railing surface of handrails and grab rails shall extend above the POOL coping or DECK a minimum of 28 inches (71.1 cm).
   iv) The horizontal clear space between grab rails shall be not less than 18 inches (45.7 cm) and not more than 24 inches (61.0 cm).
   v) Stairs wider than five feet (1.5 m) shall have at least one additional handrail for every 12 feet (3.7 m) of stair width.
e) RECESSED STEPS
   i) RECESSED STEPS shall be slip resistant, designed to be easily cleaned, and shall drain into the POOL.
   ii) RECESSED STEPS shall be uniformly spaced not less than 6 inches (15.2 cm) and not more than 12 inches (30.5 cm) vertically along the POOL wall. The top surface of the uppermost RECESSED STEP shall be located not more than 12 inches (30.5 cm) below the POOL coping or DECK.
f) Ladders
   i) Where provided, ladders shall be constructed of corrosion-resistant materials and anchored securely to the DECK.
   ii) Ladders shall have two handrails.
      (1) The upper railing surface of ladder handrails shall extend above the POOL coping or DECK a minimum of 28 inches (71.7 cm).
      (2) The clear space between ladder handrails and the POOL wall shall be not less than 3 inches (7.6 cm) and not more than 6 inches (15.2 cm).
      (3) The horizontal clear space between ladder handrails shall be not less than 17 inches (43.2 cm) and not more than 24 inches (61.0 cm).
   iii) Ladders shall be designed to resist a load of 50 pounds (22.7 kg) per linear foot applied in any direction and independently a single concentrated load of 200 pounds (90.7 kg) applied in any direction at any location. Ladders shall be designed to transfer these loads through the supports to the POOL or DECK structure.

iv) Ladder treads shall be slip-resistant.
(1) Ladder treads shall have a minimum horizontal tread depth of 1.5 inches (3.8 cm).
(2) The distance between the horizontal tread and the POOL wall shall not be greater than 4 inches (10.2 cm).
(3) Ladder treads shall be uniformly spaced not less than 7 inches (17.8 cm) and not more than 12 inches (30.5 cm) vertically at the handrails.
(4) The top surface of the upmost ladder tread shall be located not more than 12 inches (30.5 cm) below the POOL coping, gutter, or DECK.

g) Zero Depth Entries
i) Where a ZERO DEPTH ENTRY is provided, it shall be constructed with slip-resistant materials.
ii) Trench drains shall be used along a ZERO DEPTH ENTRY at the waterline to facilitate surface skimming.

h) Colors & Finish
i) Floors and walls below the water line shall be white or light pastel in color such that from the POOL DECK a BATHER is visible on the POOL floor and the following items can be identified:
(1) Algae growth, debris or dirt within the POOL, and
(2) CRACKS in the surface finish of the POOL, and
(3) Marker tiles.
ii) An exception shall be made for the following AQUATIC VENUE components:
(1) Competitive lane markings,
(2) Dedicated competitive diving well floors,
(3) Step or bench edge markings,
(4) POOLS shallower than 24 inches (61.0 cm),
(5) Water line tiles,
(6) WAVE POOL and SURF POOL depth change indicator tiles, or
(7) Other approved designs.

i) Walls
i) All corners created by adjoining walls shall be rounded or have a radius in both the vertical and horizontal dimensions to eliminate sharp corners.
ii) A contrasting color shall be provided on the edges of any support ledge to draw attention to the ledge for BATHER SAFETY.

j) Inlets
i) For POOLS greater than 50 feet wide (15.2 m), floor INLETS shall be required.
(1) Floor INLETS shall be spaced to effectively distribute the treated water throughout the POOL.
(2) Floor INLETS shall be flush with the bottom of the POOL.
(3) Distance between floor INLETS shall be no greater than 20 feet (6.1 m).
ii) Wall Inlets
(1) Wall INLET velocity shall mix the water effectively.
(2) INLETS shall be directionally adjustable to provide effective distribution of water.
(3) Wall INLETS shall be spaced no greater than 20 feet (6.1 m) apart.
(a) Corner INLETS shall be placed within 5 feet (1.5 m) of each corner of the POOL.
(b) Skimmer INLETS shall be placed at least 5 feet (1.5 m) from a SKIMMER.
(c) Isolated INLETS shall be placed in each recessed or isolated area of the POOL.
iii) The AHJ may require dye testing to evaluate the mixing characteristics of the RECIRCULATION SYSTEM. If dye test reveals inadequate mixing in the POOL after 20

minutes, the RECIRCULATION SYSTEM shall be adjusted or modified to assure adequate mixing.

k) Structural Stability
   i) POOLS shall be designed to withstand the reasonably anticipated loads imposed by POOL water, BATHERS, and adjacent soils or structures.
   ii) A hydrostatic relief valve and/or suitable under drain system shall be provided where the water table exerts hydrostatic pressure to uplift the POOL when empty or drained.
   iii) POOLS and related circulation piping shall be designed with a winterizing strategy when subject to freeze/thaw cycles.

l) Handholds
   i) Where not otherwise exempted, every POOL shall be provided with handholds (PERIMETER GUTTER SYSTEM, coping, horizontal bars, recessed handholds, cantilevered DECKING) around the perimeter of the POOL where the water depth at the wall exceeds 24 inches (61.0 cm). These handholds shall be installed not greater than 9 inches (22.9 cm) above, or 3 inches (7.6 cm) below static water level.
   ii) Horizontal recesses may be used for handholds provided they are a minimum of 24 inches (61.0 cm) long, a minimum of 4 inches (10.2 cm) high and between 2 inches (5.1 cm) and 3 inches (7.6 cm) deep. Horizontal recesses shall drain into the POOL.

m) INFINITY EDGE
   i) Not more than fifty percent (50%) of the POOL perimeter shall incorporate an INFINITY EDGE detail.
   ii) The length of an INFINITY EDGE shall be no more than 30 feet (9.1 m) long when in water depths greater than five feet (1.5 m).
   iii) Troughs, basins, or capture drains designed to receive the overflow from INFINITY EDGES shall be watertight and free from STRUCTURAL CRACKS.

n) Underwater Benches, Ledges, and Shelves
   i) All underwater benches, ledges and shelves shall be constructed with slip-resistant materials and in such a way that they can withstand the weight of person/s with which the shelf, bench, or ledge was intended to hold.
   ii) The leading horizontal and vertical edges of underwater benches, shelves, and ledges shall be outlined with slip-resistant color contrasting tile or other permanent marking of not less than ¾ inch (1.9 cm) and not greater than two inches (5.1 cm).
   iii) UNDERWATER BENCHES may be installed in areas of varying depths, but the maximum POOL water depth in that area shall not exceed 5 feet (1.5 m).
   iv) The maximum submerged depth of any seat or sitting bench shall be 20 inches (50.8 cm) measured from the water line.

o) Depth Markers & Markings
   i) POOL water depths shall be clearly and permanently marked at the following locations:
      (1) Located at the points of maximum and minimum depths,
      (2) On both sides and each end of the POOL; and
      (3) At the break in the floor slope between the shallow and deep portions of the POOL.
   ii) Depth markers shall be located on the vertical POOL wall and positioned to be read from within the POOL.
   iii) Where depth markings cannot be placed on the vertical wall above the water level, other means shall be used so that the markings will be plainly visible to persons in the POOL.
   iv) Depth markers shall also be located on the POOL coping or DECK within 18 inches (45.7 cm) of the POOL structural wall or perimeter gutter.
   v) Depth markers shall be positioned to be read while standing on the DECK.

vi) Depth markers shall be installed at not more than 25-foot (7.6 m) intervals around the POOL perimeter edge and according to the requirements of this section. For water less than 5 feet (1.5 m) in depth, the depth shall be marked at 1-foot (30.5 cm) depth intervals.
vii) Depth markers shall be constructed of a durable material resistant to local weather conditions.
viii) Depth markers shall be slip resistant when they are located on horizontal surfaces.
ix) Depth markers shall have letters and numbers with a minimum height of 4 inches (10.2 cm) of a color contrasting with background.
x) Depth markers shall be marked in units of feet and inches.
  (1) Abbreviations of "FT" and "IN" may be used in lieu of "FEET" and "INCHES."
  (2) Symbols for feet (') and inches (") shall not be permitted on water depth signs.
  (3) Metric units may be provided in addition to—but not in lieu of—units of feet and inches.
xi) For POOL water depths 5 feet (1.5 m) or shallower, all DECK depth markers shall be provided with "NO DIVING" warning signs along with the universal international symbol for "NO DIVING."
  (1) "NO DIVING" warning signs and symbols shall be spaced at no more than 25-foot (7.6 m) intervals around the POOL perimeter edge.
  (2) "NO DIVING" MARKERS shall be constructed of a durable material resistant to local weather conditions.
  (3) "NO DIVING" MARKERS shall be slip-resistant when they are located on horizontal surfaces.
  (4) All lettering and symbols shall be at least 4 inches (10.2 cm) in height.
xii) For POOLS deeper than 5 feet (1.5 m), a line of contrasting color, not less than 2 inches (5.1 cm) and not more than 6 inches (15.2 cm) in width, shall be clearly and permanently installed on the POOL floor at the shallow side of the break in the floor slope, and extend up the POOL walls to the waterline.
  (1) Depth marking at break in floor slope shall be constructed of a durable material resistant to local weather conditions and be slip resistant.
  (2) One foot (30.5 cm) to the shallow water side of the break in floor slope and contrasting band, a SAFETY float rope shall extend across the POOL surface with the exception of WAVE POOLS, SURF POOLS, and WATERSLIDE LANDING POOLS.
xiii) AQUATIC VENUES where the maximum water depth is 6 inches (15.2 cm) of water or less (such as WADING POOLS and ACTIVITY POOL areas) shall not be required to have depth markings or "NO DIVING" signage.

4) Pool Environment

a) Lighting
  i) No lighting controls shall be accessible to PATRONS or BATHERS.
  ii) POOL water surface and DECK light levels shall meet the following minimum maintained light levels:
    (1) Indoor Water Surface: 30 horizontal foot-candles (323 lux)
    (2) Outdoor Water Surface: 10 horizontal foot-candles (108 lux)
    (3) DECK: 10 horizontal foot-candles (108 lux).
  iii) Lighting shall illuminate all parts of the AQUATIC VENUE including the water, the floor of the AQUATIC VENUE, the depth markers, signs, entrances, restrooms, SAFETY equipment, and the required DECK area and walkways.
b) INDOOR AQUATIC FACILITY Ventilation

i) The INDOOR AQUATIC FACILITY owner/operator shall develop and implement a program of STANDARD AIR HANDLING SYSTEM operation, maintenance, cleaning, testing, and inspection procedures with detailed instructions, necessary equipment and supplies, and oversight for those carrying out these duties, in accordance with the AIR HANDLING SYSTEM design engineer and/or manufacturer's recommendations.
ii) The AIR HANDLING SYSTEM shall operate continuously, including providing the required amount of outdoor air. *Exception*: During non-use periods, the amount of outdoor air may be reduced by no more than 50% as long as acceptable air quality is maintained.
iii) The QUALIFIED OPERATOR shall maintain a copy of the AIR HANDLING SYSTEM design engineer and/or manufacturer original operating manuals, commissioning reports, updates, and specifications for any modifications at the facility.
iv) All indoor aquatic ventilation systems must comply with subsections 4)(b)(i)-(iii) within 24 months of implementation of this regulation.

c) Indoor/Outdoor AQUATIC FACILITY Electrical Systems and Components
i) Electrical wiring and systems shall comply with the requirements of the NEC.
ii) Electrical devices or equipment shall not occupy an interior CHEMICAL STORAGE SPACE, except as required to service devices integral to the function of the room, such as pumps, vessels, controls, lighting and SAFETY devices.
iii) Nothing in this regulation shall be construed as providing relief from any applicable requirements of the NEC or other applicable CODE.

d) POOL Water Heating
i) When designing POOL heating equipment, measures shall be taken to prevent BATHER exposure to water temperatures in excess of 104°F (40°C).
ii) Where POOL water heating equipment is installed with valves capable of isolating the heating equipment from the POOL, a listed pressure-relief device shall be installed to limit the pressure on the heating equipment to no more than the maximum value specified by the heating-equipment manufacturer and applicable CODES.
iii) Where POOL water heaters use COMBUSTION and are located inside a building, the space in which the heater is located shall be considered to be an EQUIPMENT ROOM.
(1) A carbon monoxide detector with local alarming, CERTIFIED, LISTED, AND LABELED in accordance with UL 2075, shall be installed in all such EQUIPMENT ROOMS. *Exception*: Heaters CERTIFIED, LISTED, AND LABELED for the atmosphere shall be acceptable without isolation from chemical fumes and vapors.
(2) All rooms that are immediately adjacent to spaces containing fuel burning equipment or vents carrying the products of combustion shall also be provided with locally alarming carbon monoxide detectors.

e) First Aid Area
i) Design and construction of new AQUATIC FACILITIES shall include an area designated for first aid equipment and/or treatment.

f) Emergency Exit
i) Gates and/or doors which will allow egress without a key shall be clearly and conspicuously labeled in letters at least four inches (10.2 cm) high "EMERGENCY EXIT."

g) Drinking Fountains
i) When provided, the drinking fountain shall:
(1) be CERTIFIED, LISTED, AND LABELED to NSF/ANSI 61-2014 and UL 399,
(2) not be located in a SHOWER area or toilet area,
(3) be an angle jet type installed according to applicable plumbing CODES,
(4) be supplied with water from an approved potable water supply,

(5) discharge wastewater from the drinking fountain to an approved sanitary sewer system, or other approved disposal area according to applicable plumbing CODES.

h) Garbage Receptacles
   i) A sufficient number of receptacles shall be provided within an AQUATIC FACILITY to ensure that garbage and refuse can be disposed of properly to maintain safe and sanitary conditions.
   ii) Receptacles shall be designed to be closed with a lid or other cover, so they remain closed until intentionally opened.

i) Spectator AREAS
   i) When a spectator area or an access to a spectator area is located within the AQUATIC FACILITY ENCLOSURE, the DECK adjacent to the area or access shall provide egress width for the spectators in addition to the width required by 6)(a)(2).
   ii) A spectator or other area located in a balcony within ten feet (3.0 m) of or overhanging any portion of an AQUATIC VENUE shall be designed to deter jumping or diving into the AQUATIC VENUE.
   iii) Bleachers in a spectator area shall be designed according to the ICC's most recent version of the 300 STANDARD or another applicable CODE.

5) Recirculation & Water Treatment

a) RECIRCULATION SYSTEMS & Equipment
   i) The installation and maintenance of RECIRCULATION SYSTEM components shall be performed in accordance with the designer and manufacturer specifications.
   ii) All components of the filtration and RECIRCULATION SYSTEMS shall be kept in continuous operation 24 hours per day.
      (1) The system flowrate shall not be reduced more than 25% lower than the minimum design requirements and only reduced when the POOL is unoccupied during posted closure hours of the AQUATIC VENUE.
   iii) The RECIRCULATION SYSTEM shall be designed with sufficient flexibility to achieve a hydraulic apportionment that will ensure the following:
      (1) Effective recirculation flow of treated water;
      (2) Maintenance of required disinfectant residual and pH throughout the entire AQUATIC VENUE

b) Skimmers
   i) The use of direct suction SKIMMERS shall be in accordance with manufacturer specifications.
      (1) Where SKIMMERS are used, at least one surface SKIMMER shall be provided for each 500 square feet (46 m^2) of surface area or fraction thereof. Additional SKIMMERS may be required to achieve effective skimming under site-specific conditions.
      (2) SKIMMERS shall be so located as to provide effective skimming of the entire water surface.
      (3) SKIMMERS shall be located so as not to be affected by restricted flow in areas such as near steps and within small recesses.

c) Pumping Equipment
   i) The recirculation pump(s) shall have adequate capacity to meet the recirculation flow design requirements in accordance with the maximum Total Dynamic Head (TDH) required by the entire RECIRCULATION SYSTEM under the most extreme operating conditions (e.g., clogged filters in need of backwashing).
   ii) The pump shall be designed to maintain design recirculation flows under all conditions.

d) Water Quality, DISINFECTION & pH Control

i) The water in all parts of the AQUATIC VENUE should have a minimum free available [FAC] content that meets the criteria specified in Tables 1 and 2 and shall not exceed 10 ppm chlorine or 8 ppm bromine.

Table 1	**Chlorine Disinfectant Concentrations**			
CHLORINE FAC	Min (w/o CYA)	Max (w/o CYA)	Min (with CYA)	Max (with CYA)
POOL	1.00 ppm	10 ppm	2.00 ppm	10 ppm
SPA	3.0 ppm	10 ppm	N/A	N/A

Table 2	**Bromine Disinfectant Concentrations**	
Bromine FAC	Min	Max
POOL	3.0 ppm	8.0 ppm
SPA	4.0 ppm	8.0 ppm

ii) If cyanuric acid (CYA) is used, the concentration of cyanuric acid in the water should shall not exceed 90 ppm and the FREE AVAILABLE CHLORINE shall be at least 2.0 ppm.

iii) The water shall be maintained at a pH of not less than 7.2 and not over 7.8.

iv) The total alkalinity shall be maintained within the range of 60 ppm to 180 ppm.

v) The owner shall ensure the AQUATIC FACILITY takes action to reduce the level of combined CHLORINE (chloramines) in the water when the level exceeds 0.4 ppm (Mg/L). Such actions may include but are not limited to:
   (1) SUPERCHLORINATION;
   (2) Water exchange; or
   (3) PATRON adherence to appropriate BATHER hygiene practices.

vi) When SECONDARY DISINFECTION is required for an INCREASED RISK AQUATIC VENUE, then SECONDARY DISINFECTION shall be required for all treatment systems that are combined with the INCREASED RISK AQUATIC VENUE.

f) Flow Rates/TURNOVER Times

i) A flow meter accurate to within +/- 5% of the actual design flow shall be provided for each filtration system.

ii) All AQUATIC VENUES shall comply with the maximum allowable TURNOVER times specified in Tables 3 and 4. The TURNOVER TIME shall be calculated based on the total volume of water divided by the flow rate through the filtration process. TURNOVER TIMES shall be calculated based solely on the flow rate through the filtration system.

iii) AQUATIC VENUES constructed before the adoption of this regulation shall be operated 24 hours per day at their designed flow rate.

iv) The main drain system shall be designed at a minimum to handle recirculation flow of 100% of total design recirculation flow rate, or when used, the SKIMMER SYSTEM shall be designed to handle up to 100% of the total recirculation flow rate chosen by the designer.

v) AQUATIC FEATURE water flow rates shall be checked to be within designer or manufacturer specifications prior to opening to the public.

Table 3	**AQUATIC VENUE Maximum Allowable TURNOVER Times**
Type of POOLS	**TURNOVER Maximum**
ACTIVITY POOLS	2 hours or less
DIVING POOLS	8 hours or less
Interactive Water Play*	0.5 hours or less
Lazy River	2 hours or less
Plunge POOLS	1 hour or less
Runout SLIDE	1 hour or less
WADING POOLS*	1 hour or less
Wave POOLS	2 hours or less
All Other POOLS	6 hours or less
SURF POOLS	Engineering justification from equipment manufacturer

*shall have SECONDARY DISINFECTION SYSTEMS

Table 4	**AQUATIC VENUE Maximum Allowable TURNOVER Times for SPA, Therapy*, & Exercise POOLS**	
Temperatures	**Load**	**TURNOVER Maximum**
≤ 72°-93°F (22°-34°C)	> 2500 gals/person (9.46 m^3)	4 hours or less
≤ 72°-93°F (22°-34°C)	> 450 gals/person (1.7 m^3)	2 hours or less
≤ 72°-93°F (22°-34°C)	≤ 450 gals/person (1.7 m^3)	1 hour or less
≥ 93-104°F (34°-40°C)	All	0.5 hours or less

*shall have SECONDARY DISINFECTION SYSTEMS

g) Filtration
   i) Filtration shall be required for all AQUATIC VENUES that recirculate water.
   ii) All filters shall be CERTIFIED, LISTED, AND LABELED to NSF/ANSI 50 by an ANSI-accredited certification organization.
   iii) Filters shall use the appropriate filter media as recommended by the filter manufacturer for maximum clarity and cycle length for AQUATIC VENUE use.
   iv) All filter media, including alternative filter media, shall be CERTIFIED, LISTED, AND LABELED to NSF/ANSI Standard 50 by an ANSI-accredited certification organization and within the size specifications provided by the filter manufacturer and NSF/ANSI 50.
   v) Filtration accessories shall include the following items:
      (1) Influent pressure gauge,
      (2) Effluent pressure gauge,
      (3) Backwash sight glass or other means to view backwash water clarity, and
      (4) Manual air relief system.

vi) Filters shall be installed with adequate clearance and facilities for ready and safe inspection, maintenance, disassembly, and repair. A means and access for easy removal of filter media shall be required.

h) Anti-entrapment Drainage system
   i) All POOLS subject to the requirements of the Virginia Graeme Baker Pool and Spa Act which requires the main drain grate/cover meets the ANSI/APSP 16-2011 performance STANDARD, or successor STANDARD, shall have direct pump suction drainage system entrapment hazard mitigated by one of the following methods:
      (1) Safety Vacuum Release System conforming to ASME/ANSI STANDARD A112.19,17 or ASTM STANDARD 2387, or successor STANDARD,
      (2) Suction-Limiting Vent System with a tamper-resistant atmospheric opening,
      (3) Gravity Drainage System with a collector tank,
      (4) Automatic Pump Shut-Off System,
      (5) Drain Disablement device or system, or
      (6) Other Systems that the Consumer Product Safety Commission (CPSC) approves.

i) Water Sample Collection & Testing
   i) All samples shall be obtained from a location with the following qualities:
      (1) At least 18 inches (45.7 cm) below the surface of the water, and
      (2) A water depth of between 3 to 4 feet (91.4 cm to 1.2 m) when available, and
      (3) A location between water INLETS.
      (4) The QUALIFIED OPERATOR shall ensure a sample includes a deep end sample from the AQUATIC VENUE in the water sampling rotation once per week.

j) Water Quality Chemical Testing Frequency
   i) FAC, combined AVAILABLE CHLORINE (CAC), or total bromine (TB), and pH tested at all AQUATIC VENUES prior to opening and at least one other time while open to the public each day.
   ii) CYA testing/ application: CYA must not be used in INDOOR AQUATIC VENUES, SPAS or THERAPY POOLS.
      (1) CYA levels must be checked monthly. *Exceptions*: CYA shall be tested 24 hours after the addition of CYA to the AQUATIC VENUE. If AQUATIC VENUES utilize stabilized CHLORINE as its primary DISINFECTANT, the operator shall test CYA every 2 weeks.
   iii) Total Alkalinity (TA) shall be tested weekly at all AQUATIC VENUES.
   iv) Calcium hardness is not to exceed 1,000 ppm. Calcium hardness shall be tested monthly at all AQUATIC VENUES.

k) The SATURATION INDEX shall be checked monthly.

l) Water Clarity
   i) The water in an AQUATIC VENUE shall be sufficiently clear such that the bottom is visible while the water is static at all times the AQUATIC VENUE is open or available for use.
   ii) The water shall be free of all scum and floating matter on the surface and dirt and other material on the floor.

m) WATER REPLENISHMENT SYSTEM
   i) A means of intentionally discharging and measuring or calculating the volume of both discharged AQUATIC VENUE water and filter backwash wastewater (or alternate means of achieving the same result) shall be provided.

n) CROSS CONNECTION Control
   i) The potable water supply serving an AQUATIC VENUE shall be protected against BACKFLOW consisting of either of the following:

(1) An acceptable air gap consisting of a vertical distance of not less than two pipe diameters of the water supply pipe or 6 inches (15.2 cm), whichever is greater, over the lowest free-flowing discharge point of the receiving pipe, tank, or vessel. Splash guards that are open to the atmosphere may be used around the air gap, or
(2) an approved reduced pressure zone (RPZ) BACKFLOW preventer installed according to the plumbing CODE and the AHJ.

6) DECKS & Equipment

a) DECKS
   i) PERIMETER DECKS shall be provided around 100% of the AQUATIC VENUE perimeter. Exception: A PERIMETER DECK shall not be required around 100% of the WAVE POOL perimeter but shall be provided where BATHERS gain access to the WAVE POOL at the shallow or beach end and in locations where access is required for lifeguards.
   ii) PERIMETER DECKS shall be 4 feet (1.2 m) minimum in unobstructed width around the POOL perimeter. Unobstructed DECK area 4 feet (1.2 m) minimum in width shall also be provided for access around:
      (1) Diving equipment,
      (2) Special feature stairways (such as a waterslide)
      (3) Lifeguard stands,
      (4) Diving boards
      (5) Similar DECK equipment,
      (6) ADA access equipment, and
      (7) Structural columns.
   iii) DECK edges shall be beveled, rounded, or otherwise relieved to eliminate sharp corners.
   iv) All DECKS shall have slip-resistant, textured finishes, which are not conducive to slipping under contact of bare feet in wet or dry conditions.
      (1) All surfaces required to be slip-resistant shall have a minimum dynamic coefficient of friction at least equal to the requirements of ANSI A137.1-2012 for that installation as measured by the DCOF AcuTest.
      (2) Carpet and artificial turf shall be prohibited materials for PERIMETER DECK and POOL DECK.
      (3) Wood shall be a prohibited material for use as PERIMETER DECK.
   v) PERIMETER DECK and POOL DECK shall be constructed with a uniform and easily cleaned surface such as concrete, tile, manufactured or acrylic surfaces.
      (1) Where concrete is used as a DECK material, it shall be installed in accordance with the latest edition of the American Concrete Institute (ACI) STANDARDs and in accordance with local building CODES.
   vi) Conditions between adjacent DECK materials, components, and concrete pours shall not have open joints or gaps larger than 3/16 inches wide (4.8 mm), nor a maximum difference in vertical elevation of ¼ inches (6.4 mm).
   vii) Finish materials for the PERIMETER DECK shall be suitable for the POOL environment, non-toxic, and substantially impervious.
   viii) All water that touches AREAS defined as DECK, including water originating in the AQUATIC VENUE, shall drain effectively to either perimeter AREAS or to DECK drains.
   ix) Where multiple POOLS and/or SPAS are built adjacent to each other, the DECK width separating them shall be a minimum of 6 feet (1830 mm).

b) Diving Boards

i) Diving boards shall be permitted only when the diving envelope conforms to the STANDARDS of the certifying agency that regulates competitive diving at the AQUATIC FACILITY. Such certifying agencies include:
   (1) NCAA,
   (2) NFHS,
   (3) FINA, or
   (4) U.S.A. Diving, Inc.

ii) If the AQUATIC VENUE does not have competitive diving, then the diving envelope shall conform to the diving envelope STANDARDS of:
   (1) Table 5,
   (2) Table 6,
   (3) Figure 1, and
   (4) Figure 2.

iii) Diving stands higher than 21 inches (53.3 cm) measured from the DECK to the top of the butt end of the board or platform shall have steps or a ladder and handrails.

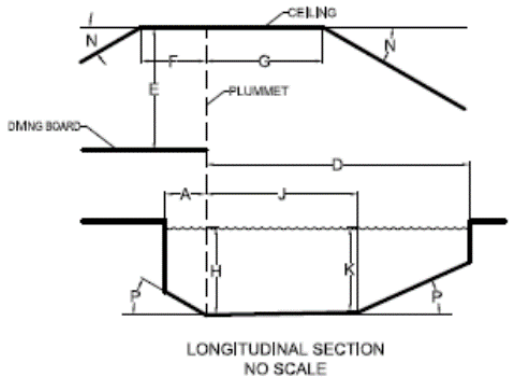
iv) Steps or ladder treads shall be self-draining, corrosion resistant, non-slip, and designed to support the maximum expected load.

v) Diving stands or platforms that are 1 meter (3.4 ft) or higher shall be protected with guard rails at least 30 inches (76.2 cm) above the board, extending at least to the edge of the water along with intermediate rails.

vi) Diving stands or platforms that are 2 meters (6.6 ft) or higher shall have guard rails with the top rail at least 36 inches (0.9 m) above the board and a second rail approximately half the distance from the platform to the upper rail.

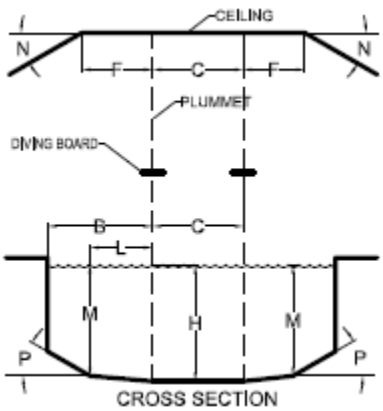
Table 5	**Diving Board Height & Dimensions**			
Diving Board Height	1.64 ft. *(0.5 m)*	2.46 ft. *(0.75 m)*	3.28 ft. *(1.0 m)*	3.84 ft. *(3.0 m)*
Diving Board Length	10.0 ft. *(3.05 m)*	12.0 ft. *(3.66 m)*	16.0 ft. *(4.88 m)*	16.0 ft. *(4.88 m)*
Diving Board Width	20.0 in. *(50.8 cm)*	20.0 in. *(50.8 cm)*	20.0 in. *(50.8 cm)*	20.0 in. *(50.8 cm)*

Figure 1.



LONGITUDINAL SECTION
NO SCALE

Figure 2.



CROSS SECTION
NO SCALE

Table 6		Minimum Dimensions of Components Related to Diving Wells by Diving Board Height			
	Diving Board Height	0.5 Meter	0.75 Meter	1.0 Meter	3.0 Meter
A	**Distance from plummet back to pool wall**	3.0 ft. *(0.91 m)*	4.5 ft. *(1.37 m)*	6.0 ft. *(1.83 m)*	6.0 ft. *(1.83 m)*
B	**Distance from plummet to pool wall at side**	10.0 ft. *(3.05 m)*	10.0 ft. *(3.05 m)*	10.0 ft. *(3.05 m)*	11.5 ft. *(3.51 m)*
C	**Distance from plummet to adjacent plummet**	8.83 ft. *(2.69 m)*	8.83 ft. *(2.69 m)*	8.83 ft. *(2.69 m)*	8.54 ft. *(2.60 m)*
D	**Distance from plummet to pool wall ahead**	26.0 ft. *(7.92 m)*	27.83 ft. *(8.48 m)*	29.58 ft. *(9.02 m)*	33.67 ft. *(10.26 m)*
E	**Height, diving board to ceiling at plummet & distances F and G**	16.0 ft. *(4.88 m)*	16.0 ft. *(4.88 m)*	16.0 ft. *(4.88 m)*	16.0 ft. *(4.88 m)*
F	**Clear overhead distance behind and each side of plummet**	8.0 ft. *(2.34 m)*	8.0 ft. *(2.34 m)*	8.0 ft. *(2.34 m)*	8.0 ft. *(2.34 m)*
G	**Clear overhead distance ahead of plummet**	16.0 ft. *(4.88 m)*	16.0 ft. *(4.88 m)*	16.0 ft. *(4.88 m)*	16.0 ft. *(4.88 m)*
H	**Depth of water at plummet**	9.5 ft. *(2.90 m)*	10.75 ft. *(3.28 m)*	12.0 ft. *(3.66 m)*	12.5 ft. *(3.81 m)*
J	**Distance ahead of plummet to depth K**	12.0 ft. *(3.66 m)*	14.25 ft. *(4.34 m)*	16.5 ft. *(5.03 m)*	19.75 ft. *(6.02 m)*
K	**Depth at distance J ahead of plummet**	8.75 ft. *(2.67 m)*	10.0 ft. *(3.05 m)*	11.28 ft. *(3.44 m)*	12.17 ft. *(3.71 m)*
L	**Distance at each side of plummet to depth M**	8.0 ft. *(2.34 m)*	8.13 ft. *(2.48 m)*	8.25 ft. *(2.51 m)*	9.92 ft. *(3.02 m)*
M	**Depth at distance L on each side of plummet**	9.08 ft. *(2.77 m)*	10.33 ft. *(3.15 m)*	11.63 ft. *(3.54 m)*	12.17 ft. *(3.71 m)*
N	**Maximum slope to reduce height E**	30°	30°	30°	30°
P	**Maximum floor slope to reduce depth ahead of K, to the sides of M, or back to pool wall behind H**	3:1	3:1	3:1	3:1

Note: Letters in column 1 above refer to Figures 1 & 2

c) Starting Platforms
   i) Starting platforms shall be installed and conform to applicable SAFETY STANDARDS established by:
      (1) FINA,
      (2) U.S.A. Swimming,
      (3) NCAA,
      (4) NFHS,
      (5) YMCA, or
      (6) Other sanctioning body.
   ii) Starting platforms shall be installed in a minimum water depth of 4 feet (1.2 m).
   iii) The leading edge of starting platforms shall have a maximum height of 30 inches (76.2 cm) above the water surface.
   iv) Starting platforms shall have slip resistant tread surfaces.
   v) Starting platforms shall be installed and secured per manufacturer recommendations at all times when in use.

7) Lifeguard & Safety-Related Equipment

a) AQUATIC FACILITIES shall not be open to users unless the equipment listed within this section is present and in a safe and working condition.
b) Emergency Communication Equipment
   i) The AQUATIC FACILITY or each AQUATIC VENUE, as necessary, shall have a functional telephone or other communication device that is hard wired and capable of directly dialing 911 or function as the emergency notification system.
   ii) The telephone or communication system or device shall be conspicuously provided and accessible to AQUATIC VENUE users such that it can be reached immediately.
c) First Aid Equipment
   i) The AQUATIC FACILITY shall have designated locations for emergency and first aid equipment.
   ii) An adequate supply of first aid supplies shall be continuously stocked and include, at a minimum, as follows:
      (1) A First Aid Guide,
      (2) Absorbent compress,
      (3) Adhesive bandages,
      (4) Adhesive tape,
      (5) Sterile pads,
      (6) Disposable gloves,
      (7) Scissors,
      (8) Elastic wrap,
      (9) Emergency blanket,
      (10) Resuscitation mask with one-way valve, and
      (11) Blood-borne pathogen spill kit.
d) Signage
   i) Signage shall be provided at the AQUATIC FACILITY or each AQUATIC VENUE, as necessary, which clearly identifies the following:
      (1) First aid location(s), and
      (2) Emergency telephone(s) or approved communication system or device.
   ii) A permanent sign providing emergency dialing directions and the AQUATIC FACILITY address shall be posted and maintained at the emergency telephone, system, or device.

iii) A permanent sign shall be conspicuously posted and maintained displaying contact information for emergency personnel and AQUATIC FACILITY management.
iv) A sign shall be posted stating the following:
(1) The operating hours of the AQUATIC FACILITY, and
(2) Unauthorized use of the AQUATIC FACILITY outside of these hours is prohibited.
v) Signage shall be placed in a conspicuous place at the entrance of the AQUATIC FACILITY communicating expected and prohibited behaviors and other information using text that complies with the intent of the following information:
(1) In case of an emergency, dial 911 or other emergency instructions;
(2) Hours of operation;
(3) THEORETICAL PEAK OCCUPANCY;
(4) Pollution of AQUATIC VENUE prohibited;
(5) Do not swim if you have open wounds;
(6) Do not swim if you are ill with diarrhea or have had diarrhea within the past 2 weeks;
(7) SHOWER before entering the water;
(8) No glass items in the AQUATIC VENUE or on the DECK;
(9) Do not swallow or spit water;
(10) Diaper changing on the DECK is prohibited;
(11) No Diving, as specified in 3)(o)(xiii);
(12) Intentional hyperventilation or extended breath holding activities are dangerous and prohibited;
(13) No animals in the AQUATIC VENUE and no animals on the DECK, except service animals, if applicable;
(14) No rough play; and
(15) Children must be supervised by a responsible adult (parent or caregiver) up to the minimum age established by the AQUATIC FACILITY.

e) The following shall be provided at all AQUATIC FACILITIES without Lifeguards:
i) AQUATIC VENUES whose depth exceeds 2 feet (61.0 cm) of standing water shall provide and maintain a U.S. Coast Guard-approved aquatic rescue throwing device, with at least a quarter-inch (6.3 mm) thick rope whose length is 50 feet (15.2 m) or 1.5 times the width of the POOL, whichever is less. The rescue throwing device shall be located in the immediate vicinity to the AQUATIC VENUE and be accessible to BATHERS.
ii) AQUATIC VENUES whose depth exceeds 2 feet (61 cm) of standing water shall provide and maintain a reaching pole of 12 foot (3.7 m) to 16 feet (4.9 m) in length, non-telescopic, non-conductive, light in weight, and with a securely attached Shepherd's Crook with an aperture of at least 18 inches (45.7 cm). The reaching pole shall be located in the immediate vicinity to the AQUATIC VENUE and be accessible to BATHERS and PATRONS.
iii) A sign shall be posted outlining the IMMINENT HEALTH HAZARDS, which require AQUATIC VENUE or AQUATIC FACILITY closure as defined in this regulation and a telephone number to report problems to the owner/operator.
iv) CPR posters that are up to date with latest CPR programs and protocols shall be posted conspicuously at all times.
v) For any AQUATIC VENUE with standing water, a sign shall be posted signifying a QUALIFIED LIFEGUARD is not on duty and that the following rules apply:
(1) Persons under the age of 14 cannot be in the AQUATIC VENUE without direct adult supervision meaning children shall be in adult view at all times, and
(2) Youth and childcare groups, training, lifeguard courses, and swim lessons are not allowed without a QUALIFIED LIFEGUARD providing PATRON surveillance.

f) The following shall be provided at all AQUATIC FACILITIES with Lifeguards:
   i) At least one backboard constructed of material easily SANITIZED/DISINFECTED shall be provided.
      (1) The number and location of backboards shall be sufficient to affect a 2-minute response time to the location of the incident.
      (2) The backboard shall be equipped with a head immobilizer and sufficient straps to immobilize a person to the backboard.
   ii) Each QUALIFIED LIFEGUARD conducting PATRON surveillance with the responsibility of in-water rescue in less than 3 feet (0.9 m) of water shall have a rescue tube immediately available for use.
   iii) QUALIFIED LIFEGUARDS shall wear attire that readily identifies them as members of the AQUATIC FACILITY'S lifeguard staff. POOL attendees and other personnel shall not wear the distinguishing emblems or suits, unless trained and certified as a lifeguard.
   iv) A whistle or other signaling device shall be worn by each QUALIFIED LIFEGUARD conducting PATRON surveillance for communicating to users and/or staff.
   v) AQUATIC FACILITIES with one QUALIFIED LIFEGUARD shall provide and maintain a U.S. Coast Guard-approved aquatic rescue throwing device as per 7)(e)(i).
   vi) AQUATIC FACILITIES with one QUALIFIED LIFEGUARD shall provide and maintain a reaching pole as per the specifications of 7)(e)(ii).

g) BARRIERS & ENCLOSURES
   i) All required BARRIERS and ENCLOSURES shall be maintained to prevent unauthorized entry to the protected space.
   ii) Self-Closing and Latching
      (1) All primary public access gates or doors serving as part of an ENCLOSURE shall have functional self-closing and self-latching closures. *Exception 1 Staffed Entry*: When the gate or door of an AQUATIC FACILITY or AQUATIC VENUE ENCLOSURE is part of a staffed entrance and is locked at all times the AQUATIC FACILITY or AQUATIC VENUE is not open to the public. *Exception 2 Lifeguard(s) Provided:* When the gate or door serves as part of an AQUATIC FACILITY or AQUATIC VENUE ENCLOSURE and the AQUATIC VENUE(S) therein has a QUALIFIED LIFEGUARD(S) conducting PATRON surveillance at all times the AQUATIC VENUE(S) is open and the gate or door is locked at all times the AQUATIC FACILITY or AQUATIC VENUE is not open to the public.
         (a) Operable parts of the release latch on self-latching devices shall be located 4.5 feet (1.4 m) above finished grade.
         (b) Self-latching devices shall not be operable by small children on the outside of the ENCLOSURE around the AQUATIC VENUE.
         (c) All gates or doors shall be capable of being locked from the exterior.
         (d) EXIT GATES or doors shall be constructed so as to prevent unauthorized entry from outside of the ENCLOSURE around the AQUATIC VENUE.
         (e) Gates or doors shall be designed in such a way that they do not prevent egress in the event of an emergency.
   iii) Indoor AQUATIC VENUES shall be securable from unauthorized entry from other building areas or the exterior.
   iv) Where separate indoor and outdoor AQUATIC VENUES are located on the same site, an AQUATIC VENUE ENCLOSURE shall be provided between them.
   v) Gates

(1) Gates shall be at least equal in height at top and bottom to the BARRIER of which they are a component.
(2) Turnstiles shall not form a part of an AQUATIC FACILITY ENCLOSURE.
(3) EXIT GATES shall be conspicuously marked on the inside of the AQUATIC VENUE or AQUATIC FACILITY.
(4) EXIT GATES shall swing away from the AQUATIC VENUE ENCLOSURE except where emergency egress CODES require them to swing into the AQUATIC VENUE ENCLOSURE.

vi) Construction Requirements
(1) AQUATIC FACILITY ENCLOSURES shall not be less than 6 feet (1.8 m) in height. Except where otherwise noted, all other BARRIERS not serving as part of an AQUATIC FACILITY ENCLOSURE shall not be less than 42 inches (1.1 m) in height.
(2) Constructed so as to afford no external handholds or footholds and preventing climbing access from nearby structures such as: light poles, site furnishings, overhanging tree limbs, or other obvious footholds or handholds.
(a) Horizontal mid-rails shall not be permitted.
(b) Chain-link fencing shall have of a maximum opening of 1¾ inches (44.4 mm) mesh.
(3) Windows on a building that forms part of an ENCLOSURE around an AQUATIC VENUE shall have a maximum opening width not to exceed 4 inches (10.2 cm). If designed to be opened, windows shall also be provided with a non-removable screen.
(4) ENCLOSURES for AQUATIC VENUES shall not block or encumber a required emergency egress path from other structures.

vii) The horizontal Space between vertical members of the ENCLOSURE shall not exceed 4 inches.
viii) The height of any opening under the bottom of the ENCLOSURE shall not exceed 2 inches.

h) Aquatic Cleaning Systems
i) The cleaning system provided shall not create an entanglement or suction entrapment hazard or interfere with the operation or use of the AQUATIC VENUE.
ii) If there are multiple AQUATIC VENUES at one AQUATIC FACILITY, the AQUATIC FACILITY may use common cleaning equipment.
iii) Use of integral vacuum systems, meaning a vacuum system that uses the main circulating pump or a dedicated vacuum pump connect to the POOL with PVC piping and terminating at the POOL with a flush-mounted vacuum port fitting, shall be prohibited.
iv) Where used, PORTABLE VACUUM cleaning equipment shall be powered by circuits having GROUND-FAULT CIRCUIT INTERRUPTERS.
v) Any ROBOTIC CLEANERS shall utilize low voltage for all components that are immersed in the POOL water.
vi) Any ROBOTIC CLEANER power supply shall be connected to a circuit equipped with a ground fault interrupter and should not be operated using an extension cord.

8) Filter/Equipment Room

a) Equipment Room
i) All piping in the EQUIPMENT ROOM shall be permanently identified by its use and the AQUATIC VENUE and AQUATIC FEATURE it serves.
ii) The equipment room shall only be accessible to authorized persons.

b) Chemical STORAGE Spaces
i) All chemicals used in swimming POOL maintenance shall be stored under conditions where they are only accessible to authorized persons and stored in a dry, well-ventilated STORAGE room according to manufacturer's instructions.

c) Chemical STORAGE
   i) All doors opening into CHEMICAL STORAGE SPACES shall be equipped with permanent signage:
      (1) Warning against unauthorized entry, and
      (2) Specifying the expected hazards, and
      (3) Specifying the location of the associated Safety Data Sheet (SDS) forms, and
      (4) Product chemical hazard National Fire Protection Association (NFPA) chart.
   ii) CHEMICAL STORAGE shall be in compliance with local building and fire CODES.
   iii) Chemical handling shall be in compliance with OSHA and EPA regulations.
   iv) For each chemical, STORAGE, handling, and use of the chemical shall be in compliance with the manufacturer's SDS and labels.
   v) AQUATIC VENUE chemicals shall be stored to prevent access by unauthorized individuals.
   vi) AQUATIC VENUE chemicals shall be stored so that they are protected from getting wet.
   vii) AQUATIC VENUE chemicals shall be stored so that if the packages were to leak, no mixing of incompatible materials would occur. SDS shall be consulted for incompatibilities.
   viii) Smoking shall be prohibited in the CHEMICAL STORAGE SPACE and "No Smoking" signage shall be posted in the CHEMICAL STORAGE SPACE.
   ix) Lighting shall be at minimum 30 foot-candles (323 lux) to allow operators to read labels on containers throughout the CHEMICAL STORAGE SPACE and pump room.
   x) Chemicals shall be stored away from direct sunlight, temperature extremes, and high humidity.
   xi) The CHEMICAL STORAGE SPACE shall be separate from the EQUIPMENT ROOM. *Exception*: For AQUATIC FACILITIES that do not currently have a CHEMICAL STORAGE SPACE separate from the EQUIPMENT ROOM, this requirement may be waived at the discretion of the local public health and/or fire officials if the chemicals are protected from exposure to heat and moisture and no imminent health or SAFETY threats are identified.
   xii) Warning signs in compliance with NFPA or HMIS ratings shall be posted on CHEMICAL STORAGE SPACE doors.

d) Chemical Handling
   i) Containers of chemicals shall be labeled, tagged, or marked with the identity of the material and a statement of the hazardous effects of the chemical according to OSHA and/or EPA materials labeling requirements.
   ii) Chemicals shall be measured using a dedicated measuring device where applicable. These measuring devices shall be clean, dry, and constructed of material compatible with the chemical to be measured to prevent the introduction of incompatible chemicals.
   iii) DISINFECTION and pH control chemicals shall be automatically introduced through the RECIRCULATION SYSTEM. Addition of SUPERCHLORINATION or shock chemicals and other POOL chemicals other than DISINFECTION and pH control may be added manually to the POOL and shall only be introduced in the absence of BATHERS.
   iv) Treatment chemicals shall be added in strict adherence to the manufacturer's use instructions to ensure levels in the water are safe for human exposure.
      (1) Whenever required by the manufacturer, chemicals shall be diluted (or mixed with water) prior to application and as per the manufacturer's directions.
      (2) Chemicals shall be added to water when diluting as opposed to adding water to a concentrated chemical.
      (3) Each chemical shall be mixed in a separate, labeled container.
      (4) Two or more chemicals shall never be mixed in the same dilution water.

v) All QUALIFIED OPERATORS, RESPONSIBLE SUPERVISORS, maintenance staff, QUALIFIED LIFEGUARD staff, or any others who are involved in the STORAGE, use, or handling of chemicals shall receive training prior to access of chemicals and receive at least an annual review of procedures thereafter.

9) HYGIENE FACILITIES

a) New Construction or Substantial Alteration. All design provisions shall be required for new construction or SUBSTANTIAL ALTERATION to an existing AQUATIC FACILITY. *Exception*: the following shall be required for all AQUATIC FACILITIES at time of adoption or within 1 year of adoption as stated:
   i) DIAPER-CHANGING STATIONS,
   ii) Soap dispensers, and
   iii) Trash cans.

b) Minimum to Provide. AQUATIC FACILITIES shall provide HYGIENE FACILITIES that include, at a minimum, toilets, urinals, SHOWERS, DIAPER-CHANGING STATIONS, and other HYGIENE FIXTURES, as specified herein.

c) HYGIENE FACILITIES shall be constructed in accordance with applicable state and local CODES.

d) The minimum number of toilets, urinals, and other HYGIENE FIXTURES provided, excluding SHOWERS, shall be the greater of the following two options:
   i) In accordance with applicable state and local CODES, or
   ii) Based upon maximum THEORETICAL PEAK OCCUPANCY of each AQUATIC VENUE.

e) Location
   i) A drinking fountain, toilet, HAND WASH STATION, and DIAPER-CHANGING STATION shall be located no greater than 300 feet (91 m) walking distance from each AQUATIC VENUE. *Exception*: An AQUATIC VENUE designed primarily for use by children less than 5 years of age shall have a drinking fountain, toilet, HAND WASH STATION, and DIAPER-CHANGING STATION located no greater than 200 feet (61 m) walking distance and in clear view from the nearest entry/exit of the AQUATIC VENUE.

f) Floors
   i) The floors of HYGIENE FACILITIES and dressing areas serving AQUATIC FACILITIES shall have a smooth, easy-to-clean, impervious-to-water, slip-resistant surface.
   ii) Floor drains shall be installed in HYGIENE FACILITIES and dressing areas where PLUMBING FIXTURES are located.

g) PLUMBING FIXTURE Requirements
   i) PLUMBING FIXTURES shall be installed and operated in a manner to adequately protect the potable water supply from back siphonage or BACKFLOW in accordance with local, state or federal regulation.
   ii) PLUMBING FIXTURES shall be designed so that they may be readily and frequently cleaned, SANITIZED, and DISINFECTED.
   iii) Total toilet or urinal counts and hand wash sink counts shall be in accordance with applicable state and local CODES.
   iv) CLEANSING SHOWER requirements
      (1) The minimum number of CLEANSING SHOWERS shall be one per sex for AQUATIC FACILITIES less than 4000 square feet (372 m^2) in collective AQUATIC VENUE surface area. *Exception*: AQUATIC VENUES located in lodging and residential settings shall be exempt.
      (2) An additional CLEANSING SHOWER per sex shall be added for each additional 4000 square feet (372 m^2) of AQUATIC VENUE space or portion thereof.

(3) CLEANSING SHOWERS shall be located in a HYGIENE FACILITY that is near the entrance and within clear view of the AQUATIC VENUE.
(4) CLEANSING SHOWERS shall be supplied with soap and a soap dispenser adjacent to the SHOWER.
(5) CLEANSING SHOWER doors or curtains shall be of a smooth, easy-to-clean material.

v) RINSE SHOWER requirements
(1) A minimum of one RINSE SHOWER shall be provided on the DECK near an entry point to the AQUATIC VENUE.
(2) Water used for RINSE SHOWERS may be at ambient temperature.
(3) Floors of RINSE SHOWERS shall be sloped to drain wastewater away from the AQUATIC VENUE and meet local applicable CODES.
(4) RINSE SHOWERS in AQUATIC FACILITIES greater than 7500 square feet (697 m^2) of water surface area shall be situated adjacent to each AQUATIC VENUE entry point or arranged to encourage BATHERS to use the RINSE SHOWER prior to entering the AQUATIC VENUE.
(5) A minimum of one RINSE SHOWER shall be provided at each entrance to a waterslide queue, beach entry AQUATIC VENUE, and LAZY RIVER AQUATIC VENUE.

h) General Requirements
i) All HYGIENE FIXTURES and appurtenances in the dressing area shall have a smooth, hard, easy-to-clean, impervious-to-water surface and be installed to permit thorough cleaning.
ii) Glass, excluding mirrors, shall not be permitted in HYGIENE FACILITIES. Mirrors shall be shatter resistant.
iii) Soap dispensers shall be securely attached adjacent to hand washing sinks and at each CLEANSING SHOWER.
iv) Hand dryers or paper towel dispensers shall be provided and securely attached adjacent to hand washing sinks.
v) Toilet paper dispensers shall be securely attached to wall or partition adjacent to each toilet.
vi) In female HYGIENE FACILITIES, covered receptacles adjacent to each toilet shall be provided for disposal of used feminine hygiene products.
vii) A minimum of one hands-free trash receptacle shall be provided in areas adjacent to hand washing sinks.

i) Cleaned and Sanitized
i) HYGIENE FACILITY FIXTURES, dressing area fixtures, and furniture shall be cleaned and SANITIZED daily and more often if necessary with an EPA-REGISTERED product and more often if necessary to provide a clean and sanitary environment.
ii) HYGIENE FACILITY floors, walls, and ceilings shall be kept clean and free of visible mold and mildew.
iii) HAND WASH STATIONS shall include the following items:
(1) Hand wash sink,
(2) Adjacent soap with dispenser,
(3) Hand drying device or paper towels and dispenser, and
(4) Trash receptacle.
iv) CLEANSING SHOWERS shall be cleaned and SANITIZED daily and more often if necessary with an EPA-REGISTERED product and more often if necessary to provide a clean and sanitary environment.
v) RINSE SHOWERS shall be cleaned daily and more often if necessary with an EPA-REGISTERED product and more often if necessary to provide a clean and sanitary environment.
(1) RINSE SHOWERS shall be easily accessible.
(2) Equipment and furniture on the DECK shall not block access to RINSE SHOWERS.

(3) Soap dispensers and soap shall be prohibited at RINSE SHOWERS.

j) DIAPER-CHANGING STATIONS
   i) All AQUATIC FACILITIES allowing use by DIAPER-AGED BATHERS shall, upon adoption of this regulation, have at least one DIAPER-CHANGING STATION in each male and female HYGIENE FACILITY or make available a unisex DIAPER-CHANGING STATION.
   ii) For existing AQUATIC FACILITIES, the adjacent plumbed hand wash sink shall be installed and operational within 1 year from the date of the AHJ's adoption of this regulation. For existing AQUATIC FACILITIES that do not yet have an adjacent plumbed hand wash sink, a portable HAND WASH STATION shall be available adjacent to the station at all times.
   iii) A covered, hands-free, plastic-lined trash receptacle or diaper pail shall be located directly adjacent to the DIAPER-CHANGING UNIT.
   iv) An EPA-REGISTERED DISINFECTANT shall be provided for maintaining a clean and DISINFECTED DIAPER-CHANGING UNIT surface before and after each use.
   v) Diaper changing shall only be done at a designated DIAPER-CHANGING STATION and shall not be allowed on the POOL DECK.
   vi) Cleaned and Sanitized
      (1) DIAPER-CHANGING STATIONS shall be cleaned and DISINFECTED daily and more often if necessary to provide a clean and sanitary environment.
         (a) They shall be maintained in good condition and free of visible contamination.
         (b) EPA-REGISTERED DISINFECTANT shall be provided in the form of either of the following:
            (i) A solution in a spray dispenser with paper towels and dispenser, or
            (ii) Wipes contained within a dispenser.
      (2) If paper towels are used for hand drying, a dispenser and paper towels shall be provided for use at HAND WASH STATIONS.
      (3) Soap dispensers shall be provided at HAND WASH STATIONS and CLEANSING SHOWERS and shall be kept full of liquid or granular soap. Bar soap shall be prohibited.
      (4) A minimum of one hands-free trash receptacle shall be provided in areas adjacent to hand washing sinks. Trash receptacles shall be emptied daily and more often if necessary to provide a clean and sanitary environment.

k) Provision of Suits, Towels, and Shared Equipment
   i) All towels provided by the AQUATIC FACILITY shall be washed with detergent in warm water, rinsed, and thoroughly dried at the warmest temperature listed on the fabric label after each use.
   ii) Any attire provided by the AQUATIC FACILITY shall be washed in accordance with the fabric label or manufacturer's instructions.
   iii) Non-absorbent, easily cleanable receptacles shall be provided for collection of used suits and towels.
   iv) Equipment provided by the AQUATIC FACILITY that comes into contact with BATHER's eyes, nose, ears, and mouth (including but not limited to snorkels, nose clips, and goggles) shall be cleaned, SANITIZED between uses, and stored in a manner to prevent biological growth.
   v) Other shared equipment provided by the AQUATIC FACILITY, including but not limited to fins, kickboards, tubes, lifejackets, and noodles, shall be kept clean and stored in a manner to prevent mold and other biological growth.
   vi) Shared equipment shall be maintained in good repair.
   vii) Used and un-SANITIZED shared equipment shall be kept separate from cleaned and SANITIZED shared equipment.

l) Sharps

i) If razors or other sharps are supplied by the AQUATIC FACILITY, a sharps container approved by local, state or federal regulations shall be provided within the HYGIENE FACILITY.
ii) Sharps within approved containers shall be disposed of as needed by the AQUATIC FACILITY in accordance with local, state, or federal regulations.
iii) A biohazard action plan shall also be on file as required by local, state or federal regulations and as part of the AQUATIC FACILITY SAFETY PLAN.

10) Water Supply/Wastewater Disposal

a) Water Supply
   i) Water serving an AQUATIC FACILITY shall be supplied from a potable water source.
   ii) There shall be no direct connection between any potable water supply system and the POOL or its piping system unless protected by a BACKFLOW prevention device.
b) Fill Spout
   i) If a fill spout is used at an AQUATIC VENUE, the fill spout shall be located so that it is not a SAFETY hazard to BATHERS.
   ii) The open end of fill spouts shall not have sharp edges or protrude more than two inches (50.8 mm) beyond the edge of the POOL.
c) Cross-Connection Control
   i) There shall be no direct connection between the DECK drains and the sanitary or storm sewer system, or the AQUATIC VENUE gutter or RECIRCULATION SYSTEM.
d) DECK Drains
   i) The placement of DECK drains, where provided, shall effectively carry water away from the AQUATIC VENUE and off the DECK without ponding.
   ii) The walkway or DECK around an AQUATIC VENUE shall be properly sloped to DECK drains or to the edge of the DECK to prevent the accumulation of standing water.
   iii) If DECK drains are provided, the drains shall discharge to the sanitary or storm sewer or as otherwise allowed by the AHJ and according to applicable plumbing CODE.
e) Sanitary Wastes
   i) Wastewater from all PLUMBING FIXTURES in the entire AQUATIC FACILITY shall be discharged to a municipal sanitary sewer system.
f) POOL Wastewater
   i) Discharged Wastewater from an AQUATIC VENUE, including filter backwash water, shall be discharged to a sanitary sewer system having sufficient capacity to collect and treat wastewater or to an on-site sewage disposal system designed for this purpose.

11) Specific AQUATIC VENUES

a) SPAS
   i) SPA filtration systems shall be operated 24 hours per day except for periods of draining, filling, and maintenance.
   ii) SPAS shall be drained, cleaned, scrubbed, and water replaced as calculated:
      (1) The water replacement interval (in days) shall be calculated by dividing the SPA volume (in gallons) by 3 and then dividing by the average number of users per day.
   iii) SPA surfaces, including interior of SKIMMERS, shall be scrubbed or wiped down, and all water drained prior to refill.
   iv) Maximum water depth shall be four (4) feet measured from the water line. The maximum depth of any seat or sitting bench shall be two (2) feet measured from the water line.
   v) Water temperature controls shall be provided to prevent the water temperature from exceeding 104º F.

(1) A thermometer shall be available to MONITOR water temperature.
(2) All SPAS must not allow jet timers to exceed 15 minutes at a time. A PATRON must manually reset the SPA timer by exiting the SPA.

vi) In addition to other the signage requirements contained within this regulation, SPAS shall also have the following information or text complying with the intent of the following information:
(1) Maximum water temperature is 104° F (40°C);
(2) Children under age 5 and people using alcohol or drugs that cause drowsiness shall not use SPAS;
(3) Pregnant women and people with heart disease, high blood pressure or other health problems should not use SPAS without prior consultation with a healthcare provider;
(4) Children under 14 years of age shall be supervised by an adult; and
(5) Use of the SPA when alone is prohibited (if no lifeguards on site).

vii) All SPAS, hot-tubs and whirlpool baths shall be SUPERCHLORINATED at least once per week.

b) Waterslides & Landing POOLS
i) A minimum of one RINSE SHOWER shall be provided at each entrance to a WATERSLIDE queue line.
ii) Signs indicating riding instructions, warnings, and requirements in accordance with the manufacturer recommendations shall be posted at the WATERSLIDE entry.
iii) All waterslides must be constructed according to manufacturer's instructions.

c) WADING POOLS
i) A BARRIER shall be provided to separate a WADING POOL from other POOLS unless the WADING POOL is separated by a distance of 15 feet (4.6 m) from other BODIES OF WATER.
ii) The BARRIER shall not be required to completely surround the WADING POOL if the shortest distance of travel between the WADING POOL around the BARRIER to the other POOL is a minimum of 15 feet (4.67 m).

d) THERAPY POOLS
i) In addition to the general AQUATIC VENUE requirements stated in this regulation, THERAPY POOLS shall comply with the additional provisions or reliefs of this section and on SECONDARY DISINFECTION.
ii) Hydrotherapy or jet systems shall be independent of the recirculation, filtration, and heating systems.
iii) Floor slope may exceed 1 foot (30.5 cm) in 12 feet (3.7 m) for water shallower than 5 feet (1.5 m). Break points in floor slope shall be identified with a contrasting band with permanent marking of not less than 1 inch (25.4 mm) and not greater than 2 inches.

e) Moveable Floors
i) The underside of the MOVEABLE FLOOR shall not be accessible to BATHERS.
ii) The design of a MOVEABLE FLOOR shall protect against BATHER entrapment between the MOVEABLE FLOOR and the POOL walls and floor.

f) INTERACTIVE WATER PLAY VENUES (SPRAY GROUNDS)
i) If a facility only consists of an INTERACTIVE WATER PLAY VENUE, then the requirements for an ENCLOSURE shall not apply
ii) Spray features shall be designed and installed to be seen clearly, so as not to be a hazard to BATHERS due to water velocity from the spray feature discharge, or other SAFETY hazards.
iii) INTERACTIVE WATER PLAY VENUES shall have a slip-resistant and easily cleanable surface. Any manufactured surfacing shall be deemed suitable by the manufacturer for aquatic and chlorinated environments.

iv) Depth markings and warning signs shall not be required for INTERACTIVE WATER PLAY VENUES.
v) The INTERACTIVE WATER PLAY VENUE shall be properly sloped so that only water from the AQUATIC FEATURES flows back to the INTERACTIVE WATER PLAY VENUE collection tank. The slope of the INTERACTIVE WATER PLAY VENUE shall be sufficient to prevent standing water from collecting on the pad. The DECK shall be protected from surface runoff.
vi) SPRAY GROUNDS must also contain a RINSE SHOWER or DISINFECTION station.

g) Wave POOLS
i) U.S. Coast Guard-approved life jackets that are properly sized and fitted shall be provided free and shall be available at, or adjacent to, the AQUATIC VENUE.

h) Other AQUATIC FEATURES
i) Other AQUATIC FEATURES not otherwise addressed in this regulation, including but not limited to climbing walls, inflatables, and play structures, shall not be installed unless designed and operated in accordance with all manufacturer's installation and operations recommendations.

12) Operating Permits

a) Owner Responsibility
i) The owner of an AQUATIC FACILITY is responsible for the facility being operated, maintained, and managed in accordance with the requirements of this regulation.
ii) The permit to operate may be withheld, revoked, or denied by the AHJ for noncompliance of the AQUATIC FACILITY with the requirements of this regulation.

b) Operating Permits
i) Operation of an AQUATIC FACILITY or newly constructed or SUBSTANTIALLY ALTERED AQUATIC VENUE without a permit to operate shall be prohibited.
(1) Prior to opening to the public, the AQUATIC FACILITY owner shall apply to the AHJ for a permit to operate.
(2) A separate permit is required for each newly constructed or SUBSTANTIALLY ALTERED AQUATIC VENUE at an existing AQUATIC FACILITY.
ii) The AHJ may order a newly constructed or SUBSTANTIALLY ALTERED AQUATIC VENUE without a permit to operate to close until the AQUATIC FACILITY has obtained a permit to operate.
iii) The permit to operate shall:
(1) be issued on an annual basis and be valid from January 1st through December 31st of each year.
(2) be issued in the name of the owner and not be transferrable from one person, business, or entity to another.
(3) be posted at the AQUATIC FACILITY in a location conspicuous to the public.

c) Variances
i) The HEALTH DIRECTOR may grant a variance to the requirements of this regulation.
ii) An AQUATIC FACILITY seeking a variance shall apply in writing with the appropriate forms provided by the AHJ.

13) Daily and Maintenance Inspections

a) Pre-operational Inspections
i) Chemical and equipment testing shall be done daily before the venue is open to the public.
ii) The POOL shall be inspected for cracks and chips in the shell, and shall be fixed when the potential for the following occurs:

(1) Leakage,
(2) Trips or falls,
(3) Lacerations,
(4) Or any hinderance in the cleaning of the AQUATIC VENUE.

b) Inspections by Facility
   i) The QUALIFIED OPERATOR or RESPONSIBLE SUPERVISOR shall ensure that the AQUATIC FACILITY preventive maintenance inspections shall also include:
      1) Monthly tests of GFCI devices,
      2) Inspections every six months of bonding conductors, where accessible.
c) Exemptions
   i) Exemptions of inspections shall be made at the discretion of the HEALTH DIRECTOR
   ii) Facility owners must apply for exemption prior to inspection

14) POOL Operation and Maintenance

a) Closure & Re-opening
   i) At any time, if the disinfectant concentrations are not within the acceptable STANDARDS, the POOL must be closed until disinfection STANDARDS are met.
   ii) If, at any time, a lightning or storm warning is issued for the area, the POOL must be evacuated and closed.
   iii) If a POOL has been closed due to an accident or drowning, the HEALTH DIRECTOR must be notified.
b) Preventive Maintenance Plan
   i) A written comprehensive preventive maintenance plan for each AQUATIC VENUE shall be available at the AQUATIC FACILITY.
   ii) The AQUATIC FACILITY preventive maintenance plan shall include details and frequency of owner/operators planned routine facility inspection, maintenance, and replacement of recirculation and water treatment components.

15) Facility Staffing

a) QUALIFIED OPERATOR Requirements & Availability
   i) As described in Section 12.a.i, applicants must show proof of knowledge and regulations by passing a written examination.
   ii) QUALIFIED OPERATORS must be available to attend to the venue as required, such as to check disinfectant levels prior to opening each day.
b) AQUATIC FACILITY Requiring QUALIFIED LIFEGUARDS
   i) All Category I swimming POOLS must provide lifeguards. For a swimming POOL less than 2,000 square feet of water surface area, a minimum of one lifeguard shall be provided. When the swimming POOL exceeds 2,000 square feet, a minimum of 2 lifeguards shall be provided, and when the swimming POOL exceeds 6,000 square feet, a minimum of 3 lifeguards shall be provided. The number of lifeguards shall be adequate enough to maintain continuous surveillance to all POOL AREAS.
   ii) All Category I swimming POOLS that have a surface area in excess of 2,000 square feet shall have at least one elevated chair or platform in the POOL area having a depth of five feet or more and be so located to provide 180-degree observation.
   iii) All Category II swimming POOLS where lifeguard services are not continuously provided shall provide a “WARNING- NO LIFEGUARD ON DUTY” in letters at least 4 inches tall and shall be conspicuously placed at all entrances to the swimming POOL.
c) Staff Management

i) Only personnel trained to perform chemical testing shall conduct water quality testing.

16) Training

a) QUALIFIED OPERATOR Training
   i) Each AQUATIC FACILTY must have a QUALIFIED OPERATOR that has completed an operator training course as determined by the HEALTH DIRECTOR.
b) Staff Training
   i) All staff must be trained in their positions and shall not take on tasks which they have not been trained to accomplish.
c) Lifeguard Training
   i) The minimum qualifications for a lifeguard shall be the satisfactory completion and current certification from a nationally recognized lifeguard training program (i.e. American Red Cross, YMCA, Ellis and Associates). Each lifeguard shall have a current CPR and First Aid certification.
   ii) Lifeguard Duties:
      (1) Lifeguards are responsible for the oversight of PATRONS in the POOL and are trained to assist and save lives in the cases of emergencies.
      (2) Lifeguards shall not be responsible for the care and maintenance of the POOL facility while performing duties of a lifeguard.

17) AQUATIC FACILITY Management

a) Operations and Records
   i) All POOLS shall maintain records showing:
      (1) FAC, combined AVAILABLE CHLORINE (CAC), or total bromine (TB), and pH tested at all AQUATIC VENUES prior to opening and at least one other time while open to the public each day.
      (2) Cyanuric acid levels tested monthly at all AQUATIC VENUES utilizing CYA. *Exceptions*: CYA tested 24 hours after the addition of CYA to the AQUATIC VENUE. If AQUATIC VENUES utilize stabilized CHLORINE as its primary DISINFECTANT, the operator testing CYA every 2 weeks.
      (3) Total Alkalinity (TA) tested weekly at all AQUATIC VENUES.
      (4) Total Dissolved Solids tested quarterly at all AQUATIC VENUES.
      (5) For heated AQUATIC VENUES, water temperature recorded at the same time the FAC (or TB) and pH tests are performed.
b) PATRON-Related Management Aspects
   i) In non-lifeguarded POOLS, signs must be mounted containing current first aid and CPR practices and must be conspicuously posted.

18) Contamination Response

The HEALTH DIRECTOR shall be notified as soon as possible in the event of an accident, drowning, or fecal accident. Each swimming POOL facility must have and follow an approved written procedure for dealing with fecal contamination.

a) CONTAMINATION RESPONSE PLAN
   i) All AQUATIC FACILITIES shall have a CONTAMINATION RESPONSE PLAN within the EAP for responding to formed-stool contamination, diarrheal-stool contamination, vomit contamination, and contamination involving blood.
   ii) A minimum of one person on-site while the venue is in operation shall be:

(1) Trained in the procedures for response to formed-stool contamination, diarrheal contamination, vomit contamination, and blood contamination; and
(2) Trained in PPE and other OSHA measures including the Bloodborne Pathogens STANDARD 29 CFR 1910.1030 to minimize exposure to bodily fluids that may be encountered as employees in an aquatic environment.

iii) Staff shall be informed of any updates to the response plan.
iv) The availability of equipment and supplies for remediation procedures shall be verified by the QUALIFIED OPERATOR at least weekly.
v) The response plan shall be reviewed at least annually and updated as necessary.
vi) The response plan shall be kept on site and available for viewing by the AHJ.

b) AQUATIC VENUE Water Contamination Response
i) In the event of a fecal or vomit contamination in an AQUATIC VENUE, the QUALIFIED OPERATOR shall immediately close the AQUATIC VENUE to swimmers until remediation procedures are complete.
ii) This closure shall include the affected AQUATIC VENUE and other AQUATIC VENUES that share the same RECIRCULATION SYSTEM.
(1) Contaminating material shall be removed (e.g., using a net, scoop, or bucket) and disposed of in a sanitary manner.
(2) Fecal or vomit contamination of the item used to remove the contamination (e.g., the net or bucket) shall be removed by thorough cleaning followed by DISINFECTION (e.g., after cleaning, leave the net, scoop, or bucket immersed in the POOL during the DISINFECTION procedure prescribed for formed-stool, diarrheal-stool, or vomit contamination, as appropriate).
(3) Aquatic vacuum cleaners shall not be used for removal of contamination from the water or adjacent surfaces unless vacuum waste is discharged to a sanitary sewer and the vacuum equipment can be adequately DISINFECTED.
(4) AQUATIC VENUE water that has been contaminated by feces or vomit shall be treated as follows:
(a) Check to ensure that the water's pH is 7.5 or lower and adjust if necessary;
(b) Verify and maintain water temperature at 77°F (25°C) or higher;
(c) Operate the filtration/RECIRCULATION SYSTEM while the POOL reaches and maintains the proper free CHLORINE concentration during the remediation process;
(d) Test the CHLORINE RESIDUAL at multiple sampling points to ensure the proper free CHLORINE concentration is achieved throughout the POOL for the entire DISINFECTION time; and
(e) Use only non-stabilized CHLORINE products to raise the free CHLORINE levels during the remediation.
(5) Formed-stool contaminated water shall have the FREE CHLORINE RESIDUAL checked and the FREE CHLORINE RESIDUAL raised to 2.0 mg/L (if less than 2.0 mg/L) and maintained for at least 25 minutes (or an equivalent time and concentration to reach the CT INACTIVATION VALUE) before reopening the AQUATIC VENUE. In AQUATIC VENUE water that contains CYA or a stabilized CHLORINE product, water shall be treated by doubling the inactivation time. Measurement of the inactivation time required shall start when the AQUATIC VENUE reaches the intended free CHLORINE level.
(6) Diarrheal-stool contaminated water shall:
(a) Check the FREE CHLORINE RESIDUAL and then raise the FREE CHLORINE RESIDUAL to 20.0 mg/L and maintain for at least 12.75 hours (or an equivalent time and

concentration to reach the CT INACTIVATION VALUE) before reopening the AQUATIC VENUE, or

(b) Circulate the water through a SECONDARY DISINFECTION SYSTEM to theoretically reduce the number of Cryptosporidium OOCYSTS in the AQUATIC VENUE below one OOCYST/100 mL.

(c) In AQUATIC VENUE water that contains CYA or a stabilized CHLORINE product, water shall be treated by:

(i) HYPERCHLORINATION accomplished by:

1. Check to ensure that the water's pH is 7.5 or lower and adjust if necessary;
2. Verify and maintain water temperature at 77°F (25°C) or higher;
3. Operate the filtration/RECIRCULATION SYSTEM while the POOL reaches and maintains the proper free CHLORINE concentration during the remediation process;
4. Test the CHLORINE RESIDUAL at multiple sampling points to ensure the proper free CHLORINE concentration is achieved throughout the POOL for the entire DISINFECTION time; and
5. Use only non-stabilized CHLORINE products to raise the free CHLORINE levels during the remediation.
6. Lowering the CYA concentration to less than or equal to 15 ppm by draining, if necessary;
7. Raising the FREE CHLORINE RESIDUAL to 20 mg/L for at least 28 hours; 30 mg/L for at least 18 hours; or 40 mg/L for at least 8.5 hours, which is needed to reach the CT INACTIVATION VALUE; and
8. Measuring the inactivation time required, which shall start when the AQUATIC VENUE reaches the intended FREE CHLORINE RESIDUAL level, or;

(ii) Circulating the water through a SECONDARY DISINFECTION SYSTEM to theoretically reduce the number of Cryptosporidium OOCYSTS in the AQUATIC VENUE below one OOCYST/100 mL. The flow rate (Q) through the SECONDARY DISINFECTION SYSTEM shall be determined based upon the total volume of the AQUATIC VENUE or AQUATIC FEATURE (V) and a prescribed dilution time (T) for theoretically reducing the number of assumed infective Cryptosporidium OOCYSTS from an initial total number of 100 million (10^8) OOCYSTS to a concentration of one OOCYST/100 mL, or;

(iii) Draining the AQUATIC VENUE completely.

(7) Vomit-contaminated water shall have the FREE CHLORINE RESIDUAL checked and the FREE CHLORINE RESIDUAL raised to 2.0 mg/L (if less than 2.0 mg/L) and maintained for at least 25 minutes (or an equivalent time and concentration to reach the CT INACTIVATION VALUE) before reopening the AQUATIC VENUE. In AQUATIC VENUE water that contains CYA or a stabilized CHLORINE product, water shall be treated by doubling the inactivation time. Measurement of the inactivation time required shall start when the AQUATIC VENUE reaches the intended free CHLORINE level.

iii) Blood contamination of a properly maintained AQUATIC VENUE'S water does not pose a public health risk to swimmers. Operators may choose whether to close the AQUATIC VENUE and treat as a formed stool contamination to satisfy PATRON concerns.

iv) For remediation and testing of AQUATIC VENUES suspected of being contaminated with Legionella the QUALIFIED OPERATOR shall:

(1) Close the SPA tub to BATHERS immediately, and shut down the hydrotherapy jets and circulation pumps, but do not drain the water.

(2) Contact the state or local public health agency having jurisdiction for information about laboratory testing for Legionella. If the health department determines that laboratory testing is needed, water and biofilm samples should be taken from the SPA tub, hydrotherapy jets, drain, and filters/filter media to test for Legionella by culture before taking the steps below. Sampling and laboratory testing are complicated and should always be done in collaboration with your state or local public health agency and a laboratory with Legionella testing expertise.
(3) Proceed as directed below after samples have been taken; it is not necessary to wait for laboratory test results. However, the SPA should not be reopened to BATHERS until all test results are negative for Legionella.
(4) Scrub vigorously all SPA surfaces, skimming devices, circulation components with FREE CHLORINE at a minimum concentration of 5 parts per million (ppm) to remove any biofilm or slime. After scrubbing, rinse the SPA with clean water and flush to waste.
(5) Drain all water from the SPA. Dispose of the water to waste or as directed by the local regulatory authority.
(6) Replace filters (for cartridge or DE filters) or filter media (for sand filters). Bag these filters and dispose as normal solid waste.
(7) Inspect the SPA thoroughly for any broken or poorly functioning components such as valves, sensors, tubing, or DISINFECTANT feeders. Make any needed repairs.
(8) Refill the SPA with clean water.
(9) HYPERCHLORINATE using 20 ppm FREE CHLORINE. a.) Keep the hydrotherapy jets off and let the HYPERCHLORINATED water circulate for 1 hour in all of the components of the SPA including the compensation/surge tank, filter housing, and piping. b.) Turn on the hydrotherapy jets to circulate the HYPERCHLORINATED water for 9 additional hours. Ensure that 20 ppm of FREE CHLORINE is maintained in the system for the entire 10 hours.
(10) Flush the entire system to remove the HYPERCHLORINATED water from all equipment prior to repeat sampling.
(11) Take repeat samples for culture-based laboratory testing to confirm that Legionella has been eliminated. Water and biofilm samples should be taken from the SPA tub, hydrotherapy jets, drain, filters/filter media, and any part of the SPA that originally tested positive for Legionella.
(12) Keep the SPA closed to BATHERS until this repeat testing has confirmed the elimination of Legionella. If laboratory testing is positive for Legionella, repeat steps 4–11 until all testing is negative for Legionella. When all tests are negative, the SPA can be reopened to BATHERS.
(13) Ensure that halogen (CHLORINE or bromine) and pH levels meet local and state STANDARDS before reopening the SPA to BATHERS. Maintain water quality according to local and state STANDARDS.
(14) If the SPA is associated with an outbreak, the following continued laboratory testing schedule shall be conducted: conduct culture-based testing every 2 weeks for 3 months, then every month for 3 months to ensure complete elimination of Legionella. If at any time during this laboratory testing schedule Legionella is found, DISINFECT again and start the testing schedule over. For AQUATIC VENUES that continue to grow Legionella, consider hiring a consultant with expertise in Legionella.

c) Surface Contamination Cleaning and Disinfection

i) If a bodily fluid, such as feces, vomit, or blood, has contaminated a surface in an AQUATIC FACILITY, facility staff shall limit access to the affected area until remediation procedures have been completed.
ii) Before DISINFECTION, all visible CONTAMINANT shall be cleaned and removed with disposable cleaning products effective with regard to type of CONTAMINANT present, type of surface to be cleaned, and the location within the facility.
iii) CONTAMINANT removed by cleaning shall be disposed of in a sanitary manner or as required by law.
iv) Contaminated surfaces shall be DISINFECTED with one of the following DISINFECTION solutions:
(1) A 1:10 dilution of fresh household bleach with water; or
(2) An equivalent EPA REGISTERED DISINFECTANT that has been approved for body fluids DISINFECTION.
(3) The DISINFECTANT shall be left to soak on the affected area for a minimum of 20 minutes or as otherwise indicated on the DISINFECTANT label directions.

19) AHJ Inspections

a) Inspection Process
i) The AQUATIC FACILITY may not be placed in operation until an inspection approved by the AHJ shows compliance with the requirements of this regulation or the AHJ approves opening for operation.
ii) The AHJ shall have the right to inspect or investigate the operation and management of an AQUATIC FACILITY.
iii) Upon presenting proper identification, an authorized employee or agent of the AHJ shall have the right to and be permitted to enter any AQUATIC FACILITY or AQUATIC VENUE area, including the recirculation equipment and piping area, at any reasonable time for the purpose of inspecting the AQUATIC VENUE or AQUATIC FEATURES to do any of the following:
(1) Inspect, investigate, or evaluate for compliance with this regulation;
(2) Verify compliance with previously written violation orders;
(3) Collect samples or specimens;
(4) Examine, review, and copy relevant documents and records;
(5) Obtain photographic or other evidence needed to enforce this regulation; or
(6) Question any person.
b) It is a violation of this regulation for a person to interfere with, deny, or delay an inspection or investigation conducted by the AHJ.
c) Publication of Inspection Forms
i) The AHJ may publish or post on the web or other source the reports of AQUATIC FACILITY inspections.
d) IMMINENT HEALTH HAZARDS
i) Any of the following violations are IMMINENT HEALTH HAZARDS which shall require immediate correction or immediate POOL closure:
(1) Failure to provide supervision and staffing of the AQUATIC FACILITY as specified in 15(a) and 15(b).
(2) Failure to provide the minimum DISINFECTANT residual levels listed in Tables 1 & 2;
(3) pH level below 6.5 or above 8.0;
(4) Failure to continuously operate the AQUATIC VENUE filtration and DISINFECTION equipment;

(5) Use of an unapproved or contaminated water supply source for potable water use;
(6) Unprotected overhead electrical wires within 20 feet horizontally of the AQUATIC VENUE;
(7) Non GFCI protected electrical receptacles within 20 feet of the inside wall of the AQUATIC VENUE;
(8) Failure to maintain an emergency lighting source;
(9) Absence of all required lifesaving equipment on DECK;
(10) AQUATIC VENUE bottom not visible;
(11) Total absence of or improper depth markings at an AQUATIC VENUE;
(12) Plumbing CROSS-CONNECTIONS between the drinking water supply and AQUATIC VENUE water or between sewage system and the AQUATIC VENUE including filter backwash facilities;
(13) Failure to provide and maintain an ENCLOSURE or BARRIER to inhibit unauthorized access to the AQUATIC FACILITY or AQUATIC VENUE when required;
(14) The SPA water temperature exceeds 104 degrees Fahrenheit;
(15) A fecal accident (formed or loose);
(16) Emergency telephone is inoperable or inaccessible;
(17) Use of unapproved chemicals or the application of chemicals by unapproved methods to the AQUATIC VENUE water;
(18) Broken, unsecured, or missing main drain grate or any submerged suction outlet grate in the AQUATIC VENUE;
(19) Number of BATHERS/PATRONS exceeds the THEORETICAL PEAK OCCUPANCY;
(20) Broken glass or sharp objects in AQUATIC VENUE or on DECK area; or
(21) Any other item determined to be a public health hazard by the AHJ.

ii) The HEALTH DIRECTOR shall be notified as soon as possible in the event of an accident, drowning, or fecal accident. Each swimming POOL facility must have a documented and implemented fecal contamination response plan.

e) Enforcement

i) It shall be a violation for any person to fail to comply with any of this regulation as adopted by the AHJ.
(1) Any person who fails to comply with any such provision shall be in violation of these regulations.
(2) For each such offense, violators shall be liable for a potential follow-up inspection(s) and associated fees.

ii) Upon determining that one or more violations of this regulation exists, the AHJ shall cause a written notice of the violation or violations to be delivered to the owner or operator of the AQUATIC FACILITY that is in violation of this regulation.

iii) Where an imminent public health hazard is found and remains uncorrected, the AQUATIC VENUE shall be closed and placarded to prohibit use until the hazard is corrected in order to protect the public health or SAFETY of BATHERS.
(1) When a placard is used, it shall be conspicuously posted at each entrance leading to the AQUATIC VENUE.
(2) When placed by the AHJ, the placard shall indicate that concealment, mutilation, alteration, or removal of it by any person without permission of the AHJ shall constitute a violation of these regulations.
(3) The AHJ shall inspect the premises within two working days of notification that the hazard has been eliminated to remove the placards after verifying correction.

iv) Conditions Warranting Action.

(1) The AHJ may summarily suspend a PERMIT to operate an AQUATIC FACILITY if:
   (a) The AHJ determines through inspection that an IMMINENT HEALTH HAZARD exists;
   (b) Operations, facilities, or equipment in the AQUATIC FACILITY fail to comply with conditions specified in this regulation;
   (c) Interference in the performance of the duties of the AHJ has occurred.

(2) The AHJ may revoke an AQUATIC FACILITY permit after providing the permit holder an opportunity for a hearing if:
   (a) Serious and repeated violation(s) of this regulation have occurred;
   (b) Repeated interference with, or assault upon a representative of the AHJ has occurred.
   (c) The permit holder fails to comply with a summary suspension order.