

Date of Notice: February 14, 2018

STATE OF RHODE ISLAND DEPARTMENT OF HEALTH PUBLIC NOTICE OF PROPOSED RULE MAKING

In accordance with Rhode Island General Laws (RIGL) 42-35-2.7, notice is hereby given that the Rhode Island Department of Health (RIDOH) proposes to repeal the Rules and Regulations for Licensing Swimming and Wading Pools, Hot Tubs, and Spas (R23-22-SWI/H&S), and replace them with the rules and regulations for Licensing Aquatic Venues (216-RICR-50-05-4).

REGULATION TITLE:

RICR Title 216 – Rhode Island Department of Health Chapter 50 – Environmental Health Subchapter 05 – Water Quality Part 4 – Licensing Aquatic Venues

TYPE OF FILING: Adoption with associated repeal.

RULEMAKING ACTION: Public Notice of Proposed Rule Making.

TIMETABLE FOR ACTION ON THE PROPOSED RULE: The public comment period ends on Friday, March 16, 2018.

SUMMARY OF PROPOSED RULE: The RIDOH is proposing rulemaking to update design and operational standards for aquatic venues to incorporate existing state and federal requirements, as well as the design standards set forth in the CDC's Model Aquatic Health Code.

COMMENTS INVITED: All interested parties are invited to submit written comments concerning the proposed regulations. Written comments can be submitted by mail to Paula Pullano, Rhode Island Department of Health, 3 Capitol Hill, Providence, RI 02908-5097 or by email at paula.pullano@health.ri.gov by the close of **Friday, March 16, 2018**. Please note that comments submitted to RIDOH by other means than the prescribed mailing and email address may not be received and addressed in RIDOH's concise explanatory statement. To ensure that your comments are received, please send them to the prescribed mailing and email address.

PUBLIC HEARING: In accordance with R.I. Gen. Laws § 42-35-2.8(c), an oral hearing will be granted if requested by twenty-five (25) persons, by a governmental agency, or by an association having at least twenty-five (25) members. A request for an oral hearing must be made within ten (10) days of this notice, and must clearly state the name of the regulation for which the hearing is being requested.

WHERE COMMENTS MAY BE INSPECTED: Rhode Island Department of Health, 3 Capitol Hill, Providence, Rhode Island 02908-5097.

FOR FURTHER INFORMATION CONTACT: Paula Pullano, Rhode Island Department of Health, Division of Policy, Information, and Communications, 3 Capitol Hill, Providence, Rhode Island 02908-5097, 401-222-1042, paula.pullano@health.ri.gov.

AUTHORITY FOR THE RULEMAKING: R.I. Gen. Laws § 23-22-2.

REGULATORY FINDINGS: In the development of the proposed amendment, consideration was given to: 1) alternative approaches; 2) overlap or duplication with other statutory and regulatory provisions; and 3) significant economic impact on small business. No alternative approach, duplication, or overlap was identified based on available information. RIDOH has determined that the benefits of the proposed rule justify the costs of the proposed rule.

216-RICR-50-05-4

TITLE 216 - DEPARTMENT OF HEALTH

CHAPTER 50 – ENVIRONMENTAL HEALTH

SUBCHAPTER 05 - WATER QUALITY

PART 4 – Licensing of Aquatic Venues

4.1 AUTHORITY AND PURPOSE

4.1.1 AUTHORITY

These regulations are promulgated pursuant to the authority conferred under R.I. Gen. Laws § 23-22-2, for the purpose of adopting minimum safety standards for Aquatic Venues.

4.1.2 SCOPE

These regulations apply as defined in R.I. Gen. Laws § 23-22-1.

4.1.3 INCORPORATION BY REFERENCE

- A. These regulations hereby adopt and incorporate the U.S. Department of Health and Human Services Centers for Disease Control and Prevention's "2016 Model Aquatic Health Code" (July 2016) § 4.0, Facility Design and Construction Standards, by reference, and those sections of the Model Aquatic Health Code cross-referenced therein, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- B. These regulations hereby adopt and incorporate the American Public Health
 Association/American Water Association/Water Environmental Federation's
 "Standard Methods for the Examination of Water and Wastewater, 23rd Edition"
 (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- C. These regulations hereby adopt and incorporate the NSF International Standard/American National Standard's "NSF/ANSI 50 2016a, Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities" (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.

4.2 **DEFINITIONS**

- A. The following definitions shall apply in the interpretation and application of this Part:
 - 1. "Americans with Disabilities Act" or "ADA" means the Americans with Disabilities Act of 1990 and subsequent amendments thereto.
 - 2. "Authority Having Jurisdiction" or "AHJ" is synonymous with "Licensing Agency."
 - 3. "Applicant" means an individual or business entity with the legal authority to apply for licensure of an Aquatic Venue.
 - 4. "Aquatic Facility" is comprised of one or more Aquatic Venues.
 - 5. "Aquatic Venue" means a traditional swimming pool, non-traditional pool, wading pool, therapeutic pool, hot tub or spa.
 - 6. "Barrier" means an obstacle intended to prevent direct access from one point to another.
 - 7. "Cleansing Shower" means a shower, located within a hygiene facility, using warm water and soap. The purpose of a cleansing shower is to remove contaminants including perianal fecal material, sweat, skin cells, personal care products, and dirt before bathers enter the Aquatic Venue.
 - 8. "Director" means the Director of the Rhode Island Department of Health or his or her designee.
 - "Enclosure" means 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.
 - 10. "Hygiene Facility" means a structure or part of a structure that contains toilet, shower, diaper-changing unit, hand wash station, and dressing capabilities serving bathers and patrons at an aquatic facility.
 - 11. "Hygiene Fixtures" means all components necessary for hygiene facilities including plumbing fixtures, diaper-changing stations, hand wash stations, trashcans, soap dispensers, paper towel dispensers or hand dryers, and toilet paper dispensers.
 - 12. "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.
- 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).
- 14. "Infinity Edge" means 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. They are also referred to as "vanishing edges," "negative edges," or "zero edges."
- 15. "In-kind Replacement" means replacement equipment identical to that which was originally approved by the Licensing Agency when the Aquatic Facility or Aquatic Venue was constructed or during a subsequent alteration.
- 16. "Licensee" means any person who holds a license issued by the Licensing Agency pursuant to these regulations and applicable statutes.
- 17. "Licensing Agency" means the Rhode Island Department of Health.
- 18. "Like-kind Replacement" is synonymous with "in-kind replacement."
- 19. "Model Aquatic Health Code" or "MAHC" means the 2016 Model Aquatic Health Code, Second Edition (July 2016), U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
- 20. "Non-substantial Alteration" means the alteration, modification, or renovation of an Aquatic Venue where the total cost of the work is 10% or less than the replacement cost of the Aquatic Venue and does not result in a change in water treatment or hydraulics.
- 21. "Operator" means Licensee or the Licensee's designee responsible for the operation and maintenance of the water and air quality systems and the associated infrastructure of the Aquatic Facility or Aquatic Venue.
- 22. "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.

- 23. "Person" includes any partnership, association, corporation, city or town.
- 24. "Potable Water Source" means a Public Water System licensed by the Rhode Island Department of Health.
- 25. "ppm" means parts per million.
- 26. "Public Water System" means water systems including licensed community water systems, non-transient/non-community water systems, or transient non-community water systems, as licensed by the Rhode Island Department of Health.
- 27. "Recirculation System" means the combination of the main drains, gutter or skimmer system, inlets, piping, pumps, controls, surge tank, balance tank and components that provide water recirculation to and from the Aquatic Venue and the treatment system.
- 28. "Rinse Shower" means a shower typically located in the pool deck area with ambient temperature water.
- 29. "Secondary Disinfection Systems" means those disinfection processes or systems that are required for Increased Risk Aquatic Venues and are used in addition to disinfection systems that impart either a chlorine or bromine disinfectant residual.
- 30. "Substantial Alteration" means the alteration, modification, or renovation of an Aquatic Venue where the total cost of the work exceeds 10% of the replacement cost of the Aquatic Venue or results in a change in water treatment or hydraulics.
- 31. "Supplemental Treatment Systems" means those disinfection processes or systems that are not required for an Aquatic Venue for health and safety reasons. If approved by the Licensing Agency, they may be used to enhance overall system performance and improve water quality.
- 32. "Swimming Pool" as broadly defined in R.I. Gen. Laws § 23-22-1, includes the following sub-classifications:
 - a. "Traditional Swimming Pool" means a watertight structure of concrete, masonry, or other approved materials located either indoors or outdoors, used for bathing or swimming and filled with a filtered and disinfected water supply, together with buildings, appurtenances and equipment used in connection therewith, excluding "water slides" and/or "recreational water parks."
 - b. "Non-traditional Pool" means a watertight structure of concrete,
 masonry, or other approved materials located either indoors or outdoors, filled with a filtered and disinfected water supply and

allowing for total or partial bather immersion, together with buildings, appurtenances and equipment used in connection therewith. Non-traditional pools include lazy rivers, landing pools, wave pools, surf pools, and other special purpose pools holding a filtered and disinfected water supply for total or partial bather immersion.

- c. "Hot Tub" is synonymous with "Spa."
- d. "Spa" means any watertight structure having a maximum depth of forty-eight (48) inches (1.2 meters), filled with a filtered and disinfected water supply, either mineral or nonmineral in nature, utilizing hot, cold or ambient temperature water that is not emptied after each individual use, used in conjunction with high velocity water recirculation systems, together with buildings, appurtenances and equipment used in connection therewith.
- e. "Therapeutic Pool" is synonymous with "Spa."
- f. "Wading Pool" means a watertight structure of concrete, masonry, or other approved materials located either indoors or outdoors, used for bathing or swimming, filled with a filtered and disinfected water supply, which includes a range in water depth from two (2) feet down to zero for wading, together with buildings, appurtenances and equipment used in connection therewith.

4.3 LICENSURE, LIFEGUARDS AND INSPECTIONS

4.3.1 REQUIREMENT TO OBTAIN LICENSURE

No person acting severally or jointly with any other shall operate or maintain an Aquatic Venue without a license unless exempt under R.I. Gen. Laws Chapter 23-22.

4.3.2 PERIOD OF LICENSURE

Periods of licensure for Aquatic Venues shall be determined in accordance with R.I. Gen. Laws § 23-22-6(a).

4.3.3 POSTING REQUIREMENTS

- A. A license issued in accordance with this Part shall be posted in a conspicuous place on the premises where it is visible by individuals who use the Aquatic Venue.
- B. If an active license becomes defaced or is physically destroyed while still in effect, the Licensee shall apply for a duplicate license in accordance with the requirements of R.I. Gen. Laws § 23-22-10 and for the fee assessed in the rules

and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title). The Licensee shall display the duplicate license in accordance with § 4.3.3(A) of this Part.

C. Suspended and revoked licenses must be removed from display in accordance with R.I. Gen. Laws § 23-22-10.

4.3.4 APPLICATION FOR NEW LICENSE

- A. An application for a license to operate or maintain a newly constructed Aquatic Venue, or an application for a new license to operate or maintain an existing Aquatic Venue following a change of ownership, shall be submitted to the Licensing Agency on forms obtained from the Licensing Agency. The application form shall contain such information as the Licensing Agency reasonably requires and shall be accompanied by the licensure fee set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title).
- B. The Licensing Agency's granting of such license shall be in accordance with R.I. Gen. Laws 23-22-7.

4.3.5 LICENSE RENEWAL

A license may be renewed from year to year with approval by the Licensing

Agency upon receipt of the license renewal fee set forth in the rules and
regulations pertaining to the Fee Structure for Licensing, Laboratory and
Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title).

4.3.6 LICENSES FOR EXISTING UNLICENSED AQUATIC VENUES

- A. A license for an existing unlicensed Aquatic Venue subject to licensure under R.I.

 Gen. Laws Chapter 23-22 shall be granted if the Applicant demonstrates to the
 Licensing Agency's satisfaction that the Aquatic Venue meets the requirements
 set forth in R.I. Gen. Laws Chapter 23-22 and this Part, or if the Applicant
 demonstrates to the Licensing Agency's satisfaction that a variance to a
 regulatory requirement does not create a violation of federal or state law and
 does not create a condition that presents an imminent health hazard.
- B. Applicants for licensure shall follow the procedure set forth in § 4.3.4 of this Part.

4.3.7 DENIAL OF LICENSE

License applications are subject to denial in accordance with R.I. Gen. Laws § 23-22-7.

4.3.8 SUSPENSION AND REVOCATION OF LICENSE

<u>Licenses are subject to suspension and revocation in accordance with R.I. Gen.</u>
<u>Laws § 23-22-8.</u>

4.3.9 PROCEDURE FOR DENIAL, SUSPENSION OR REVOCATION OF LICENSE

- A. Whenever an action shall be proposed to deny, suspend or revoke the license of an Applicant and/or Licensee, the Licensing Agency shall notify the Applicant or Licensee, by certified mail or by hand delivery, setting forth the reasons for the proposed action. The Applicant or Licensee shall be provided opportunity for hearing in accordance with R.I. Gen. Laws Chapter 42-35 and § 4.7.4 of this Part.
- B. If the Licensing Agency determines that conditions at an Aquatic Venue present an imminent health hazard that requires emergency action and incorporates a finding to that effect in its order, the Licensing Agency may order summary suspension of a license pending proceedings for revocation or other action.

4.3.10 VIRGINIA GRAEME BAKER POOL AND SPA SAFETY ACT

- A. Licenses shall not be issued for new Aquatic Venues that fail to demonstrate compliance with the requirements of the Virginia Graeme Baker Pool and Spa Safety Act, 15 U.S.C. §§ 8001-8003.
- B. Licenses shall be suspended per § 4.3.9(B) of this Part for licensed Aquatic

 Venues that fail to demonstrate compliance with the requirements of 15 U.S.C.

 §§ 8001-8003 until such time that the Licensee demonstrates to the Licensing Agency's satisfaction that compliance has been achieved.

4.3.11 UNAPPROVED SUBSTANTIAL ALTERATIONS TO EXISTING LICENSED AQUATIC VENUES

Licenses for any Aquatic Venue with substantial alterations that have not received prior approval from the Licensing Agency may be suspended per § 4.3.9 of this Part until such time the Licensee demonstrates to the Licensing Agency's satisfaction that such alterations comply with §§ 4.4, 4.5 and 4.6 of this Part.

4.3.12 LIFEGUARDS

- A. Requirements for lifeguard oversight of Aquatic Venues are pursuant to R.I. Gen. Laws § 23-22-6(b).
- B. Aquatic Venues that operate without lifeguards shall comply with the requirements of §§ 4.5.14(H), 4.5.14(I)(3), 4.5.14(J), 4.6.6(D) and 4.6.8(C) of this Part.

4.3.13 INSPECTIONS AND WATER QUALITY TESTING

- A. The Licensing Agency shall be granted access in accordance with R.I. Gen. Laws 23-22-11.
- B. Upon request of the Licensing Agency, Licensees shall complete an Aquatic Venue self-assessment inspection checklist provided by the Licensing Agency.

 Licensees shall return the checklist to the Licensing Agency within 30 days of the date of the request.
- 4.4 DESIGN STANDARDS AND CONSTRUCTION REQUIREMENTS
 FOR NEW AQUATIC FACILITIES AND AQUATIC VENUES; FOR
 SUBSTANTIAL ALTERATIONS TO EXISTING AQUATIC
 FACILITIES AND AQUATIC VENUES; FOR NON-SUBSTANTIAL
 ALTERATIONS TO EXISTING AQUATIC FACILITIES AND
 AQUATIC VENUES; AND FOR IN-KIND REPLACEMENTS
- All Aquatic Venues that require licensure under R.I. Gen. Laws Chapter 23-22 shall comply with the requirements set forth in §§ 4.1.3(A), 4.1.3(B) and 4.1.3(C) of this Part.

4.5 SUPPLEMENTAL REGULATIONS FOR FACILITY DESIGN AND CONSTRUCTION REQUIREMENTS FOR ALL AQUATIC FACILITIES AND AQUATIC VENUES

4.5.1 GENERAL

- A. Model Aquatic Health Code references to "design professional who is registered or licensed to practice their respective design profession" shall mean a Professional Engineer with an active Rhode Island registration. (Restriction on MAHC § 4.0)
- B. Recirculation of unfiltered and/or untreated water is prohibited. (Restriction on MAHC § 4.7.1.10.2.1)
- C. Aquatic Venues with infinity edges shall satisfy the enclosure requirements of § 4.5.14 of this Part and shall provide for a permanent, fixed safety barrier not less than five (5) feet in height at the infinity edge to protect against falls from the infinity edge. (Restriction on MAHC 4.5.15)
- D. Food and/or beverage concessions shall be permitted in designated area(s) within the Aquatic Facility provided that the concession structures, service area, seating, patron circulation and related activities are separated from the Aquatic Venue by a permanent, fixed barrier that does not encroach on the Aquatic Venue's perimeter walkway. (Restriction on MAHC § 4.6.9.1)

- E. The Applicant shall coordinate review with all other agencies from which the Applicant is required to obtain approval. The Applicant shall provide copies to the Licensing Agency of permits issued by other agencies if the Licensing Agency so requests. (Restriction on § MAHC 4.1.3.1.2)
- F. The Applicant shall communicate Licensing Agency approvals to other agencies involved in the construction of an Aquatic Facility or Aquatic Venue. (Restriction on MAHC § 4.1.3.1.3)
- G. In cases where the Aquatic Facility or Aquatic Venue is exempt from Americans with Disabilities Act standards, the owner shall provide written documentation to the Licensing Agency attesting to such exemption at the time of application for construction or substantial alteration to an Aquatic Facility or Aquatic Venue.

 (Restriction on MAHC 4.5.10).
- H. The Licensing Agency shall conduct a conformance inspection of newly constructed Aquatic Facilities and Aquatic Venues, and substantially altered Aquatic Facilities and Aquatic Venues, upon completion of construction or renovation. The Licensing Agency shall not issue a license to operate until the Applicant has corrected, to the satisfaction of the Licensing Agency, all deficiencies identified during the inspection. (Restriction on MAHC 4.1.5.3)

4.5.2 SKIMMER SYSTEMS

- A. Skimmer systems shall include a minimum of two skimmers.
- B. The piping and other pertinent components of a skimmer system shall be sized based on 100 percent of recirculation flow being directed through the skimmer system at the maximum possible recirculation flow rate as determined by pump capacity and minimum total dynamic head of the recirculation system.

 (Restriction on MAHC § 4.7.1.5.1.4)
- C. Each skimming device shall be equipped with an equalizer pipe located at least one (1) foot below the lowest skimmer overflow level, or some other device to prevent air lock in the skimmer suction line. (Restriction on MAHC § 4.7.1.5)

4.5.3 OVERFLOW GUTTERS

- A. Overflow gutters extending completely around a pool shall be provided on all pools having a water surface area of 4,000 square feet or more. (Restriction on MAHC § 4.7.1.5.1.5)
- B. The gutter system shall be designed to allow continuous removal of water from the pool's upper surface based on 125 percent of recirculation flow being directed through the gutter system at the maximum possible recirculation flow rate as determined by pump capacity and minimum total dynamic head of the recirculation system. (Restriction on MAHC § 4.7.1.4.2.1)

C. A gutter system shall provide an acceptable handhold for bathers and present no accident hazard to bathers. (Restriction on MAHC § 4.5.14.1)

4.5.4 ACCESS AND EGRESS

There shall be at least one means of access and egress located at the shallow end of a swimming pool and at least one means of access and egress located at the deep end of a swimming pool. (Restriction on MAHC § 4.5.3.1)

4.5.5 LANE MARKINGS

The Applicant shall state the basis of design for lane markings and end wall targets, such as FINA, NCAA, USA Swimming, NFSHSA, or another recognized standard. (Restriction on MAHC § 4.2.1.4)

4.5.6 DIVING AREA

Platforms and diving stands that are over three (3) feet high shall be equipped with guard rails. (Restriction on MAHC § 4.8.2.2.3)

4.5.7 THEORETICAL PEAK OCCUPANCY

Three hundred (300) square feet of pool water surface area shall be reserved around each diving board or platform. This area shall not be included in determining the bather load capacity. (Restriction on MAHC § 4.1.2.3.5.3)

4.5.8 ELECTRICAL REQUIREMENTS

All electrical wiring for Aquatic Venues shall comply with R.I. Gen. Laws Chapter 23-27.3.

4.5.9 HEATER REQUIREMENTS

- A. Water heaters shall have a seal of approval from a standards testing agency such as the American National Standards Institute (ANSI-Z-21.56) or the Underwriters Laboratory (UL 1261). (Restriction on MAHC § 4.6.4)
- B. Electrically operated water heaters shall comply with § 4.5.8 of this Part. (Restriction on MAHC 4.6.4)
- C. Water heaters shall be equipped with a thermostatic control for the water temperature and shall be set at a temperature not to exceed 104°F. (Restriction on MAHC § 4.6.4)
- D. A fixed thermometer shall be installed on the discharge side of the heater.
 (Restriction on MAHC § 4.6.4)

4.5.10 PRE-COAT FILTERS

- A. Pressure pre-coat filters shall be equipped with a pre-coat pot for the purpose of introducing filter aid to form a pre-coat evenly over the filter elements when a filter is put into initial operation and after each cleaning. (Restriction on MAHC § 4.7.2.3)
- B. The filter plant shall be provided with such pressure, vacuum, or compound gauges as are required to indicate the condition of the filter. An air relief valve shall be provided at the high point of a pressure pre-coat filter. (Restriction on MAHC § 4.7.2.3)
- C. Vacuum pre-coat filter installations shall be equipped with an adjustable high vacuum automatic shutoff to prevent damage to the pump by cavitation.

 (Restriction on MAHC § 4.7.2.3)

4.5.11 VACUUM CLEANING

An existing aquatic venues that has an integral vacuum system as described by MAHC § 4.8.7.3 of the Model Aquatic Health Code shall be required to make, upon determination by the Department in its sole discretion that such configuration is present, all alterations necessary to comply with MAHC § 4.8.7. (Restriction on MAHC § 4.8.7.3)

4.5.12 HYGIENE FACILITIES AND HYGIENE FEATURES

- A. The minimum number of lavatories and water closets provided for each sex shall be equal to no less than one (1) per sixty (60) bathers based on maximum bather load. (Restriction on MAHC § 4.10.1.4)
- B. The minimum number of cleansing showers provided for each sex shall be equal to no less than one (1) per forty (40) bathers based on maximum bather load. (Restriction on MAHC § 4.10.1.4)
- C. Urinals for male bathers may be substituted for up to one-third the number of water closets required where more than one water closet is required. (Restriction on MAHC § 4.10.1.4)
- D. The Licensing Agency may increase the number of required fixtures for Aquatic Facilities at schools or other locations where scheduling of facility use warrants special consideration. (Restriction on MAHC § 4.10.1.4)

4.5.13 DEPTH MARKERS AND DIVING RESTRICTIONS

A minimum of one (1) water depth marker and one (1) no-diving marker is required for all wading pools. (Restriction on MAHC § 4.5.19.8)

4.5.14 ENCLOSURES AND BARRIERS

- A. The maximum vertical clearance between grade and the bottom of an outdoor

 Aquatic Venue enclosure shall be no greater than two (2) inches, measured on
 the side of the enclosure which faces away from the Aquatic Venue. (Restriction
 on § MAHC 4.8.6.2)
- B. Openings in the enclosure structure shall not allow passage of a four (4) inch diameter sphere. (Restriction on MAHC § 4.8.6.2)
- C. Solid enclosures that do not have openings, such as a masonry or stone walls, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints. (Restriction on MAHC § 4.8.6.2)
- D. Where the enclosure is composed of horizontal and vertical members, the distance between the tops of the horizontal members must be 45 inches or more, and the distance between the vertical members shall not exceed 4 inches. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed one (1) inch in width. (Restriction on MAHC § 4.8.6.2)
- E. Where the enclosure is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall be no more than one (1) inch. (Restriction on MAHC § 4.8.6.2)
- F. Enclosures constructed with chain-link fencing shall have a maximum mesh opening of 1.3 square inches unless the enclosure is provided with slats fastened at the top or the bottom which reduce the openings to no more than 1.0 square inch. (Restriction on MAHC § 4.8.6.2.1.2)
- G. Release mechanisms for self-latching devices must be located no less than fifty-four (54) inches from the bottom of the gate. (Restriction on MAHC § 4.8.6.3.7)
- H. Enclosures for outdoor Aquatic Venues operating without lifeguards shall comply with R.I. Gen. Laws §§ 23-22-6(b)(1) and 23-22-6(b)(4).
- Where a wall of a building serves as part of an outdoor Aquatic Venue enclosure, direct access to the pool through the wall shall be limited to doors and windows that meet the following conditions.
 - 1. Windows leading to the Aquatic Venue area shall have a latching device at least fifty-four (54) inches above the floor. (Restriction on MAHC § 4.8.6.2.3)
 - 2. Hinged Doors, sliding doors or sliding screen doors leading to the Aquatic Venue area shall be self-closing and shall have a self-latching device that meets the requirements of § 4.5.13(G) of this Part. (Restriction on MAHC § 4.8.6.3)

- 3. Doors leading to outdoor Aquatic Venues that operate without lifeguards shall meet the requirements of R.I. Gen. Laws § 23-22-6(b)(1). (Restriction on MAHC § 4.8.6.3)
- J. Access to Indoor Aquatic Facilities operating without lifeguards shall comply with the requirements of R.I. Gen. Laws § 23-22-6(b)1.
- Where a wading pool is adjacent to the deep-water area of another Aquatic Venue, a minimum four (4) foot vertical barrier with a self-closing and selflatching gate shall be installed to separate the two Aquatic Venues. (Restriction on MAHC § 4.12.9.2)

4.5.15 WATER SUPPLY AND WASTEWATER DESIGN

- A. The discharge end of a pipe delivering potable water to an Aquatic Venue shall provide an air gap equivalent to at least two (2) pipe diameters above the maximum elevation of the water in the Aquatic Venue. Piping from a potable water system shall not be physically connected to the recirculation system of an Aquatic Venue. (Restriction on MAHC § 4.11)
- B. There shall be no direct physical connection between any part of an Aquatic Venue or its recirculation system and a sanitary sewer or subsurface sewage disposal system unless equipped with a backflow device approved by the Licensing Agency. (Restriction on MAHC § 4.11)

4.5.16 CONSUMABLES

All consumable materials, including but not limited to filter cartridges, filter media and water treatment chemicals, shall be listed and labeled to the standards of NSF/ANSI 50 by an ANSI-accredited certification organization.

4.6 REQUIREMENTS FOR THE OPERATION OF AQUATIC FACILITIES AND AQUATIC VENUES

4.6.1 GENERAL SANITATION REQUIREMENTS

- A. Aquatic Facilities shall be maintained in good repair and working order, and in a clean and sanitary condition.
- B. Aquatic Facilities shall be kept clear of debris and organic materials. Aquatic Venue water and surfaces shall be kept clear of slime and biofilm.
- C. The floors of dressing, toilet, shower rooms and passageways shall be well drained and shall be treated daily with an EPA-approved fungicide.
- D. Hot tubs, spas and therapeutic pools shall be drained and cleaned no less than weekly.

4.6.2 DAILY WATER QUALITY MONITORING

A. Operators shall, on each operating day prior to opening an Aquatic Venue to bathers, visually observe water clarity and collect and analyze water samples to verify that water quality is not detrimental to the health and safety of bathers. If any water quality parameter is not within the range listed in the appropriate table in §§ 4.6.2(B)(8), 4.6.2(B)(9), 4.6.2(B)(10), or 4.6.2(B)(11) of this Part, or water clarity does not meet the standards of § 4.6.2(C) of this Part, the Aquatic Venue shall close and remain closed until such time that the Licensing Agency determines the water quality meets all standards.

B. Chemical Standards of the Aquatic Venue water:

- 1. An Aquatic Venue shall be continuously disinfected by a chlorinated or brominated agent which imparts a measurable residual.
- Only chlorine products that are EPA-registered for use as sanitizers or disinfectants in Aquatic Venues in the United States are permitted.
- 3. Bromine-based disinfectants may be applied to Aquatic Venues through the addition of an organic bromine compound (1,3-Dibromo-5,5-dimethylhydantoin (DBDMH) or 1-bromo-3-chloro-5,5-dimethylhydantoin (BCDMH)).
- 4. Use of cyanuric acid or stabilized chlorine is prohibited for use in all indoor Aquatic Venues and in outdoor hot tubs, spas and therapeutic pools.
- 6. Testing equipment shall be capable of measuring the maximum and minimum chemical standards based on Aquatic Venue type and disinfectant. FAS-DPD titration test kits are considered acceptable in determining maximum and minimum disinfectant residuals. Reagents shall be replaced prior to their expiration date.
- 7. Chemicals other than those used for the proper maintenance of the Aquatic Venue water shall not be added to an Aquatic Venue without the written approval of the Licensing Agency. The Licensing Agency shall determine, in its sole discretion, if such chemicals will require more frequent water quality monitoring and/or monitoring for additional water quality parameters.
- 8. Acceptable water quality parameters for traditional swimming pools, non-traditional pools, and wading pools using a chlorine disinfectant are as follows:

Parameter Minimum Ideal Maximum

Free chlorine residual (ppm) for indoor traditional swimming pools, indoor non-traditional pools, and indoor wading pools	1.0	<u>2.0-</u> <u>4.0</u>	10.0
Free chlorine residual (ppm) for outdoor traditional swimming pools, outdoor non-traditional pools, and outdoor wading pools not using cyanuric acid or stabilized chlorine	1.0	<u>2.0-</u> <u>4.0</u>	10.0
Free chlorine residual (ppm) for outdoor traditional swimming pools, outdoor non-traditional swimming pools, and outdoor wading pools using cyanuric acid or stabilized chlorine	2.0	<u>2.0-</u> <u>8.0</u>	10.0
Combined Chlorine (ppm)	0.0	0.0	0.2
<u>pH</u>	<u>7.2</u>	7.4- 7.6	<u>7.8</u>

9. Acceptable water quality parameters for all hot tubs, spas and therapeutic pools using a chlorine disinfectant are as follows:

	<u>Minimum</u>	Ideal	Maximum
Temperature (degrees Fahrenheit)		Personal preference	<u>104</u>
Free chlorine residual (ppm) for all hot tubs, spas and therapeutic pools	2.0	3.0-5.0	10.0
Combined chlorine (ppm)	0.0	0.0	0.2
<u>pH</u>	<u>7.2</u>	<u>7.4 – 7.6</u>	<u>7.8</u>

10. Water quality parameters for traditional swimming pools, non-traditional pools, and wading pools using a bromine disinfectant are as follows:

	<u>Minimum</u>	Ideal	<u>Maximum</u>
Total Bromine Residual (ppm)	3.0	4.0-6.0	8.0

<u>pH</u> <u>7.2</u> <u>7.4-7.6</u> <u>7.8</u>

11. Water quality parameters for all hot tubs and spas using bromine disinfectant are as follows:

	<u>Minimum</u>	<u>Ideal</u>	Maximum
Temperature (degrees Fahrenheit)		Personal preference	<u>104</u>
Total bromine residual (ppm)	4.0	<u>4.0-6.0</u>	8.0
pН	<u>7.2</u>	<u>7.4 – 7.6</u>	<u>7.8</u>

- C. At all times an Aquatic Venue is open to bathers the water shall be sufficiently clear such that a marker tile or floor suction outlets are visible while the water is static. In the absence of a marker tile or floor suction outlet, the Operator shall obtain approval from the Licensing Agency for an alternate method of determining water clarity.
- D. Operators shall record the results of all daily water quality analyses, water clarity observations, routine maintenance, corrective actions and closures on forms provided by the Licensing Agency. These records shall be available to the Licensing Agency at the time of an inspection authorized under § 4.3.13 of this Part, and shall be submitted to the Licensing Agency electronically within 24 hours of any written or telephone request from the Licensing Agency.
 - 1. Operators shall maintain copies of all records required under § 4.6.2(D) of this Part for no less than one (1) year.

4.6.3 BACTERIOLOGICAL ANALYSIS OF WATER

- A. Operators shall collect one (1) water sample every 90 days from each year-round Aquatic Venue for heterotrophic plate count analysis by a laboratory certified for Method 9215B. Water samples shall be collected in February, May, August, and November.
- B. Operators shall collect one (1) water sample from each seasonal Aquatic Venue in July and one water sample from each seasonal Aquatic Venue in August, a minimum of 30 days apart, for heterotrophic plate count analysis by a laboratory certified for Method 9215B.
- C. No water sample shall have a heterotrophic plate count density greater than 200 colony forming units per milliliter (200 CFU/ml) as determined by the standard thirty-five degree Celsius (35°C) agar plate count.

- D. The Licensing Agency may require, when water quality or laboratory analytical results so warrant, Licensees with hot tubs, spas and therapeutic pools to collect water samples for analysis for the Pseudomonas group by a laboratory certified for Method 9213E or IDEXX Pseudalert.
- E. No water sample shall contain Pseudomonas aeruginosa at a density greater than five (5) organisms per 100 ml.
- F. Samples collected for microbiological examination testing shall be collected in accordance with procedures set forth in § 4.1.3(B) of this Part.
- G. The Operator shall close the effected Aquatic Venue immediately upon notification that the heterotrophic plate count for a water sample exceeds 200 CFU or when Pseudomonas aeruginosa are present in a water sample at a density greater than five (5) organisms per 100 ml. Operators shall notify the Licensing Agency of the analytical results and the closure, by telephone, within 24 hours or on the next business day. The Aquatic Venue shall remain closed until such time the Operator has restored water quality and has provided evidence of such to the Licensing Agency.
- H. Year-round Aquatic Venues shall submit laboratory analytical results that do not require reporting under § 4.6.3(G) of this Part to the Licensing Agency electronically by the 10th day of the month following the month in which the sample was collected (e.g. February sampling results must be received by the Licensing Agency by March 10).
- I. Seasonal Aquatic Venues shall submit laboratory analytical results that do not require reporting under § 4.6.3(G) of this Part to the Licensing Agency electronically by the 10th day of the month following the month in which the samples were collected (e.g. July sampling results must be received by the Licensing Agency by August 10).
- J. The Licensing Agency shall require that an Aquatic Venue conduct

 bacteriological sampling at an increased frequency in accordance with § 4.7.3 of
 this part if the Aquatic Venue fails to maintain water quality in accordance with §§
 4.6.2(B), 4.6.2(C) or 4.6.3 of this Part.

4.6.4 GENERAL SAFETY REQUIREMENTS

All entrances to an Aquatic Venue shall be secured with a locking device at all times during which the Aquatic Venue is closed to bathers.

4.6.5 CHEMICAL STORAGE

- A. Chemical storage shall comply with local building and fire codes.
- B. Chemical handling shall be conducted in a safe and appropriate manner.

- C. Storage, handling and use of all chemicals shall comply with the applicable manufacturers' safety data sheets and labels.
- D. Chemical manufacturer's safety data sheets shall be consulted for storage incompatibilities with other chemicals. Aquatic Venue chemicals shall be stored so that no mixing of incompatible materials would occur if the packages were to leak.
- E. Aquatic Venue chemicals shall be stored to prevent access by unauthorized individuals.
- F. Aquatic Venue chemicals shall be stored so that they are protected from getting wet.
- G. Possible ignition sources, including but not limited to gasoline, diesel, natural gas, or gas-powered equipment such as lawn mowers, motors, grills, pool heaters, or portable stoves shall not be stored or installed in the chemical storage space.
- H. Smoking shall be prohibited in the chemical storage space.
- Lighting in the chemical storage space shall be sufficient to allow operators to read labels on containers throughout the chemical storage space.
- J. Chemicals shall be stored away from direct sunlight, temperature extremes, and high humidity.
- K. A single container of a chemical that has been opened and is currently in use in the equipment room may be kept in a staging area of the equipment room if the chemical(s) is protected from exposure to heat and moisture.
- L. The chemical storage space shall be separate from the equipment room.
- M. Warning signs shall be posted on chemical storage space doors.
- N. Personal protective equipment shall be available as required on the chemical safety data sheets.
- O. 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.
- P. All Aquatic Venue chemical containers (e.g. day tanks) shall be labeled as to their contents.

4.6.6 AQUATIC FACILITY POLICIES AND SIGNAGE

A. All licensees shall establish written policies governing no less than the following:

- prohibiting any person with an infectious and/or communicable disease, open lesion, blister, rash, or cut from using the Aquatic Venue;
- prohibiting any person who currently has, or has had diarrhea within the prior two weeks, from using the Aquatic Venue;
- 3. prohibiting spitting, spouting water, and blowing of the nose in the Aquatic Venue;
- 4. prohibiting hyperventilation or extended breath holding activities;
- prohibiting running, boisterous, or rough play in the Aquatic Venue and in surrounding areas;
- 6. prohibiting animals in the Aquatic Facility, except for service animals as defined by the ADA.
- establishing safety provisions pertaining to the use of slides and diving boards;
- 8. requiring bathers to take cleansing showers prior to entering the Aquatic Venue;
- 9. prohibiting food and drink within the Aquatic Facility except in designated areas;
- 10. stating maximum bather occupancy for each Aquatic Venue;
- 11. stating the hours of operation and a prohibition of unauthorized use outside of hours of operation; and
- 12. other provisions the Licensee may deem necessary for the protection and safety of bathers.
- B. <u>Licensees with therapeutic pools, hot tubs and spas shall establish additional written policies:</u>
 - 1. Advising the following to contact their physician regarding the appropriateness of their use of hot tubs and spas:
 - a. pregnant women;
 - b. individuals suffering from heart disease, diabetes and high or low blood pressure; and
 - c. persons using alcohol, anticoagulants, antihistamines,
 vasoconstrictors, vasodilators, stimulants, narcotics or tranquilizers.

- 2. permitting the use of the therapeutic pool, hot tub, or spa only for a reasonable length of time, not to exceed fifteen (15) minutes; and
- 3. suggesting that bathers shower and cool down prior to returning for another brief stay to prevent nausea, dizziness and fainting.
- C. The policies required in §§ 4.6.6(A) and (B) of this Part shall be posted on signs in lettering sufficiently large and at a sufficient number of locations to be visible by bathers throughout the Aquatic Facility.
- D. Licensees with Aquatic Venues operating without lifeguards must post the signage required for compliance with R.I. Gen. Laws § 23-22-6(b)3.

4.6.7 COMMUNICATIONS EQUIPMENT

- A. Aquatic Facilities shall have a functional telephone or other communications system or device that is hard wired and capable of directly dialing 911 or functions as the emergency notification system.
- B. The telephone or communications system or device required under § 4.6.7(A) shall be conspicuously provided and accessible to Aquatic Facility users such that it can be reached immediately.
- C. Signage shall clearly identify the emergency telephone or communications system or device.
- D. A permanent sign shall be posted by the emergency telephone or communications system or device providing the following:
 - 1. Aquatic Facility address;
 - 2. emergency dialing instructions for police, fire and emergency responders; and
 - 3. contact information for Aquatic Facility management.

4.6.8 FIRST AID

- A. Aquatic Facilities shall have a designated location for first-aid equipment.
- B. First aid supplies shall be continuously stocked and shall include at a minimum:
 - 1. a first-aid guide;
 - 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.
- C. Aquatic Facilities operating without lifeguards shall comply with R.I. Gen. Laws § 23-22-6(b)(2).

4.6.9 RESCUE DEVICES

- A. Aquatic Venues with depths greater than two (2) feet of standing water shall provide and maintain a U.S. Coast Guard-approved aquatic rescue throwing device with at least a 1/4-inch thick rope that is 50 feet or 1.5 times the width of the pool in length, whichever is less.
- B. Aquatic Venues with depths greater than two (2) feet of standing water shall provide and maintain a non-telescopic reaching pole of non-conductive material, 12 feet to 16 feet in length, with a securely attached Shepherd's Crook that has an aperture of at least eighteen (18) inches.
- C. Rescue devices shall be located in the immediate vicinity of the Aquatic Venue and shall be accessible to bathers.
- D. Aquatic Facilities operating with lifeguards shall provide at least one spinal injury board constructed of easily sanitized/disinfected material shall be provided. The board shall be equipped with a head immobilizer and sufficient straps to immobilize a person to the spinal injury board.

4.7 COMPLIANCE AND ENFORCEMENT

4.7.1 VARIANCES

A. The Licensing Agency may grant a variance to a requirement set forth in this

Part, either upon its own motion or upon request of the applicant from the

provisions of this Part in a specific case, if it finds that a literal enforcement of

such provision will result in unnecessary hardship to the applicant, provided that

such variance will not be contrary to the public interest and/or the health and

safety of the public.

- B. An applicant requesting a variance shall file such request in writing setting forth in detail the basis upon which the request is made and providing sufficient evidence to demonstrate to the Licensing Agency's satisfaction that a variance to a regulatory provision of this Part does not create a violation of federal or state law and does not create a condition that presents an imminent health hazard.
- C. Upon the filing of each request for variance with the Licensing Agency and within sixty (60) days thereafter, the Licensing Agency shall notify the applicant by certified mail of its approval. In the case of a denial, a hearing date, time and place may be scheduled if the applicant chooses to appeal the denial.

4.7.2 VIOLATIONS

Persons who violate the provisions of this Part shall be fined in accordance with R.I. Gen. Laws § 23-22-12.

4.7.3 RETURN TO COMPLIANCE

- A. Upon the Licensing Agency's determination in its sole discretion that an Aquatic Venue was operating in a manner detrimental to the health and safety of users, the Licensee shall post public notice on site of the adverse condition within the timeframe established by the Licensing Agency.
- B. The Licensee, at Licensee's expense, shall collect water samples for laboratory analysis at a frequency determined by the Licensing Agency for a minimum period of three months, until such time that the Licensing Agency is satisfied that the detrimental condition has been corrected, after which time the Licensee shall revert to the routine sampling schedule required under § 4.6.3 of this Part.
- C. The Licensing Agency may direct the Licensee to make an inspection at the Licensee's expense to determine the cause of the detrimental condition and to develop a Corrective Action Plan.
- D. A Corrective Action Plan shall be signed by a pool care professional with certification demonstrating competency in this field, including but not limited to certification obtained through the National Swimming Pool Foundation, the Association of Pool and Spa Professionals, or another agency that the Licensing Agency in its sole discretion considers to be equivalent. Corrective Action Plans that include engineering modifications to the Aquatic Venue shall also be signed by a Rhode Island-registered Professional Engineer.
- E. The Corrective Action Plan shall be submitted to the Licensing Agency no later than thirty (30) days of the Licensing Agency's notification to the Licensee that action is required under § 4.7.3(C) of this Part.
- F. Upon the Licensing Agency's determination that the Corrective Action Plan is acceptable, the Licensee shall implement and complete the Corrective Action Plan within the timeframe established by the Licensing Agency.

4.7.4 HEARINGS AND REVIEWS

All hearings and reviews required under the provisions of R.I. Gen. Laws Chapter 42-35 and this Part shall be held in accordance with the provisions of the rules and regulations for Practices and Procedures Before the Rhode Island Department of Health.

RULES AND REGULATIONS FOR LICENSING SWIMMING AND WADING POOLS, HOT TUBS AND SPAS

[R23-22-SWI/H&S]

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATION



Department of Health

May 1975

AS AMENDED

Mov	1079	(\mathbf{E})
iviay	1770	(L)

November 1987

October 1989

June 1990

July 1990 (E)

October 1990

August 1991 (E)

November 1991 (E)

February 1992

January 2002 (re-filing in accordance with the provisions of section 42-35-4.1 of the Rhode Island General Laws, as amended)

January 2007 (re-filing in accordance with the provisions of section 42-35-4.1 of the Rhode Island General Laws, as amended)

September 2012

INTRODUCTION

These Rules and Regulations For Licensing Swimming and Wading Pools, Hot Tuba and Spas (R23-22-SWI/H&S) are promulgated pursuant to the authority conferred under section 23-22-2 of the General Laws of Rhode Island, 1956, as amended, and are established for the purpose of adopting revised fees for the licensing of swimming and wading pools, hot tubs, and spas in this state.

Pursuant to the provisions of section 42-35-3(c) of the General Laws of Rhode Island, 1956, as amended, the following were given consideration in arriving at the regulations: (1) alternative approaches to the regulations; (2) duplication or overlap with other state regulations; and (3) significant economic impact placed on facilities. No alternative approach, duplication or overlap was identified. The health and safety of the public overrides any economic impact on small business as defined in Chapter 42-35 which may be incurred as a result.

These Rules and Regulations shall supersede all previous Rules and Regulations Pertaining to Swimming Pools, promulgated by the Rhode Island Department of Health and filed with the Secretary of State.

TABLE OF CONTENTS

			PAGE
PART I	DEEL	NITIONS AND GENERAL REQUIREMENTS FOR	4
IMNII		APPROVAL OF PLANS AND SPECIFICATIONS AND	т
		NSURE OF SWIMMING AND WADING POOLS, HOT TUBS AND SPAS	
	LICE	INDURE OF SWIMMING AND WADING FOOLS, HOT TODS AND SITES	
	Section	on R23-22-SWI/W/H&S	
	1.0	Definitions	
	2.0	General Requirement and Procedure for the Approval of Plans and Specific	ations for
		Construction of Swimming and Wading Pools, Hot Tubs & Spas	
	3.0	General Requirement and Procedure for Licensure	
	4.0	Application for License and Fee	
	5.0	Issuance and Renewal of License and Fee	
	6.0	Inspections	
	7.0	Denial, Suspension and Revocation of License	
PART II	<u>CON</u>	STRUCTION REQUIREMENTS	5
	Section	on R23-22-SWI/W/H&S	
	8.0	Swimming Pools	
	8.1	Construction Materials	
	8.2	Structural Design and Stability	
	8.3	Slope of Pool Bottom and Sidewalls	
	8.4	Water Depth Markings	
	8.5	Fences and Enclosures	
	8.6	Overflow Gutters	
	8.7	Surface Skimmers	
	8.8	Deck and Walkway	
	8.9	Ladders, Steps and Stairs	
	8.10	Hand Hold	
	8.11	Lighting, Ventilation & ElectricalRequirements	
	8.12	Diving Area	
	8.13	Swimming Pool Slides	
	8.14	Recirculation System and Equipment	
		a) Filters	
		i. Pressure Sand Filters	
		ii. Diatomaceous Earth Filters	
		iii. Cartridge Filters	
		b) Disinfectant Apparatus	
	8.15	Main Outlets and Drains	
	8.16	Treated Water Inlets	
	8.17	Vacuum Cleaners	
	8.18	Bathhouses and Sanitary Facilities	
	8.19	Bather Load	

			PAGE
	8.20	Lifeline .	
	9.0	Wading Pools	
	9.1	Construction Requirements	
	9.2	Decks	
	9.3	Recirculation System	
	10.0	Hot Tubs and Spas	
	10.1	Construction Requirements	
	10.2	Decks & Walkways	
	10.3	Heater & Temperature	
	10.4	Inlets & Drains	
	10.5	Recirculation System & Equipment	
PART III		ERAL REQUIREMENTS FOR WATER SUPPLY AND WASTE WATER SWIMMING AND WADING POOLS, HOT TUBS AND SPAS.	13
	Section	n R23-22-SWI/W/H&S	
	11.0	Water Supply	
	12.0	Wastewater Disposal	
PART IV	REQU	JIREMENTS FOR THE OPERATION OF SWIMMING AND	14
	WAD	ING POOLS, HOT TUBS AND SPAS	
	Section	n R23-22-SWI/W/H&S	
	13.0	General Sanitation Requirements	
	14.0	Chemical and Bacteriological Analysis of the Water	
		14.1 Chemical Standards	
		14.2 Bacteriological Quality of the Water	
	15.0	Clarity of Water	
	16.0	General Safety Requirements	
PART V	VARI	ANCE, VIOLATIONS AND SANCTIONS, PRACTICES AND	18
	PROC	EDURES AND SEVERABILITY	
	Section	n R23-22-SWI/W/H&S	
	17.0	Variance Procedure	
	18.0	Violations and Sanctions	
	19.0	Procedures and Practices	
	20.0	Severability	
APPENDE	XA		19

PART I DEFINITIONS AND LICENSING PROCEDURES Section R23-22-SWI/W/H&S

Section 1.0 DEFINITIONS

Wherever used in these Rules and Regulations the following terms shall be construed as follows:

- 1.1 "Act" refers to Chapter 23-22 of the General Laws of Rhode Island, 1956, as amended, entitled, "Licensing of Swimming Pools."
- 1.2 "Barrier" means a fence, a wall, a building wall or a combination thereof, which completely surrounds the swimming pool and obstructs access to the swimming pool.
- 1.3 "Director" means the Director of the Rhode Island Department of Health.
- 1.4 "Licensing Agency" means the Rhode Island Department of Health.
- 1.5 "Person" includes any partnership, association, corporation, city or town pursuant to section 23-22-1 of the Act.
- 1.6 "Swimming Pool", the term swimming pool includes all traditional swimming pools, wading pools, and therapeutic pools owned or maintained by any person, partnership, association, corporation, city or town or state, except swimming pools maintained by an individual for the sole use of his or her household and guests without charge for administration and not for the purpose of profit or in connection with any business operated for the purpose of profit and except also swimming pools owned and maintained by the United States. The term "swimming pool" wherever the context requires shall be construed to include the apparatus, structure and equipment pertaining to swimming pool, the premises on which the pool is located and the premises appurtenant thereto, pursuant to section 23 22 1 of the Act, and as further defined as follows:
- 1.6.1 "Traditional Swimming Pool", hereafter referred to as swimming pool, means a watertight structure of concrete, masonry, or other approved materials located either indoors or outdoors, used for bathing or swimming and filled with a filtered and disinfected water supply, together with buildings, appurtenances and equipment used in connection therewith, excluding "water slides" and/or "recreational water parks."
- 1.6.2 "Wading Pool" means a watertight structure of concrete, masonry, or other approved materials located either indoors or outdoors, used for bathing or swimming and filled with a filtered and disinfected water supply, together with buildings, appurtenances and equipments used in connection therewith which includes a range in water depth from two (2) feet down to zero for wading.
- 1.6.3 "Therapeutic Pool" is synonymous with "Hot Tub" or "Spa".
- 1.6.4 "Hot Tub or Spa" means any watertight structure having a maximum depth of forty-eight (48)inches (1.2 meters) used in conjunction with high velocity water recirculation systems, utilizing hot, cold or ambient temperature water either mineral or nonmineral in nature which is not emptied after each individual use.
- 1.7 "Seasonal License" shall mean any license issued no sooner than June 1, and expiring on September 30 of the year issued, unless sooner revoked for violation of the provisions of Chapter 23-22, or of the regulations adopted in accordance therewith.
- 1.8 "Year-round License" shall mean any license issued from January 1, and expiring on December 31 of

the year issued, unless sooner revoked for violation of the provisions of Chapter 23-22 or of the regulations adopted in accordance therewith.

Section 2.0 GENERAL REQUIREMENTS AND PROCEDURE FOR THE APPROVAL OF PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF SWIMMING AND WADING POOLS, HOT TUBS & SPAS

- No person shall begin construction of a swimming or wading pool, hot tub or spa, or make significant alterations, defined as major work on the pool structure or filtration system, not to include the replacement of like kind equipment, as determined by the Licensing Agency, to such existing pool(s), hot tubs or spas, until the plans and the specifications have been approved in writing by the Licensing Agency. Such approval shall be granted if the plans are found to meet the requirements herein.
 - 2.1.1 Any plans and specifications for construction of a swimming or wading pool, hot tub or spa, shall be prepared, signed and stamped by a professional engineer registered in the State of Rhode Island. The plans and specifications shall be submitted to the Licensing Agency for approval and shall be accompanied by the application form provided by the Licensing Agency.
 - 2.1.2 The Licensing Agency shall require the owner of the swimming or wading pool, hot tub or spa, to give assurance that construction or alterations shall be in compliance with the plans and specifications as approved by the Licensing Agency. Such assurance shall be included in the application form provided by the Licensing Agency and signed by the Owner and the Design Engineer.
 - 2.1.3 No deviation from the approved plans and specifications shall be made during construction or alterations without prior written approval of the Licensing Agency.

Section 3.0 GENERAL REQUIREMENT AND PROCEDURE FOR LICENSURE

No person acting severally or jointly with any other shall operate, or maintain a swimming or wading pool, hot tub or spa as defined herein, without a license in accordance with the statutory and regulatory provisions herein, unless otherwise exempt pursuant to section 23-22-6 of the Act.

Section 4.0 APPLICATION FOR LICENSE AND FEE

4.1 Application for a license to operate or maintain a swimming or wading pool, hot tub or spa, as defined herein, shall be made to the Licensing Agency on forms provided by the Agency. The application form shall contain such information as the Licensing Agency reasonably requires, and shall be accompanied by the licensure fee as set forth in the Rules and Regulations Pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health.

Every organization which provides recreational facilities for persons under the age of eighteen (18) years and which is exempt from income taxes pursuant to the provisions of title 26, section 501(c)(3) of the United States Code and which maintains a swimming pool shall pay a fee as set forth in the Rules and Regulations Pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health.

These provisions shall not apply to any swimming pool maintained by the state.

Section 5.0 ISSUANCE AND RENEWAL OF LICENSE AND FEE

- 5.1 Upon receipt of an application for a license and the licensing fee, the Licensing Agency shall issue an initial license or renewal thereof within thirty (30) days of receipt of the application, provided the applicant meets the requirements of the Act and the regulations herein. Said license unless sooner suspended or revoked shall expire by limitation on the 31st day of December of the year issued for year round licenses; on the 30th day of September for seasonal licenses and may be renewed from year to year thereafter and approval by the Licensing Agency and payment of license renewal fee of the appropriate amount stated in the Rules and Regulations Pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health per swimming or wading pool, hot tub or spa, made payable by check or money order to the General Treasurer, State of Rhode Island.
- 5.2 A license issued hereunder shall be kept posted in a conspicuous place on the premises and readily visible by individuals who use the pool.
- 5.3 Whenever a license may become defaced or destroyed while still in effect, the licensing agency shall, upon application thereof, and upon payment of a fee as set forth in the Rules and Regulations Pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health—issue a duplicate license to the applicant.

Section 6.0 INSPECTIONS

- 6.1 The Director or his duly authorized agent(s) shall at all reasonable times and at least once each year and such shorter intervals as may be deemed advisable, cause inspection to be made to ascertain whether each swimming or wading pool is being maintained in compliance with the regulatory provisions herein.
- 6.2 The Licensing Agency shall at all reasonable times have authority to enter upon any and all parts of the premises on which any swimming or wading pool, hot tub or spa is located and of the premises appurtenant thereto to make the inspection or to obtain samples of water for the analyses provided for in the Act and the regulations herein, or to make any examination or investigation whatsoever for the purpose of determining whether the provisions of the Act and the regulations herein are being violated or whether the condition and method of maintenance of any swimming or wading pool hot tub or spa, subject to licensure will be detrimental to the health and safety of the users thereof.

Section 7.0 DENIAL, SUSPENSION AND REVOCATION OF LICENSE

- 7.1 The Licensing Agency shall deny the issuance of a license to operate a swimming or wading pool, hot tub or spa, whenever the Licensing Agency finds that the licensure requirements herein are not met. Furthermore, whenever the Licensing Agency shall have reason to believe that any public swimming or wading pool, spa, and/or hot tub is being operated and/or maintained in violation of the regulations and statutory provisions herein, or whenever the licensing agency has reason to believe that the condition and method of maintenance of any such public swimming or wading pool, hot tub or spa will be detrimental to the health and safety of the users, the Licensing Agency may, after due notice and hearing revoke any such license if it finds that such swimming or wading pool, spa, and/or hot tub is being maintained in violation of the regulations herein, or if the Licensing Agency shall be satisfied that the conditions and method of maintenance of such pool hot tub or spa will be detrimental to the health and safety of the users. The holder of a license shall upon its revocation promptly surrender the same to the Licensing Agency.
- 7.2 Whenever an action shall be proposed to deny, suspend or revoke the license of an applicant and/or licensee, the licensing agency shall notify the operator of the swimming or wading pool, the spa or hot tub, by certified mail (or may be hand delivered), setting forth reasons for the proposed action, and the

applicant or licensee shall be given an opportunity for a prompt and fair hearing in accordance with Chapter 42-35 of the General Laws of Rhode Island, 1956, as amended and section 19.0 herein.

7.2.1 However, if the licensing agency finds that public health, safety or welfare, including the health and safety of the public, imperatively requires emergency action and incorporates a finding to that effect in its order, the licensing agency may order summary suspension of license pending proceedings for revocation or other action.

PART II CONSTRUCTION REQUIREMENTS Section R23-22-SWI/W/H&S

Section 8.0 SWIMMING POOLS

8.1 <u>Construction Materials</u>

A swimming pool and its appurtenances shall be constructed of materials which are non-toxic to humans, inert, impervious and enduring. Such materials shall be capable of withstanding the design stresses of the particular swimming pool to be constructed, and provide a water tight tank with a smooth, easily eleanable surface. The finished surface shall be white or a light color.

8.2 Structural Design and Stability

- 8.2.1 A swimming pool shall be so constructed and of such shape and size so as to be safely patrolled and to provide good circulation of water.
- 8.2.2 Swimming pools shall be designed and constructed to withstand anticipated structural loadings when full or empty, and that the design and materials used shall be in accordance with generally accepted good structural engineering practices.

8.3 Slope of Pool Bottoms and Sidewalls

- 8.3.1 The slope of the bottom of the pool where the water depth is less than five (5) feet shall be uniform and shall not exceed a pitch of one foot vertical in twelve (12) feet horizontal.
- 8.3.2 In portions of the pool with water depths greater than five (5) feet, the slope of the bottom may not be more than one foot vertical in three (3) feet horizontal.
- 8.3.3 Swimming pool walls shall be either:
 - a) vertical or have a slope not to exceed one foot horizontal for each five (5) feet of vertical sidewall depth; or
 - b) vertical for a distance of three (3) feet below the water level, below this the wall may be curved to the bottom with a radius of less than or equal to the difference between the bottom depth at that point and three (3) feet.

8.4 WATER DEPTH MARKINGS

- 8.4.1 The water depths of a swimming pool shall be plainly marked on the pool deck at the edge of the pool and on the vertical walls at or above the water surface.
- 8.4.2 Markings shall be a dark color spaced at one foot depth intervals where the water depth is less than five (5) feet. The water depth at the deepest portion of a swimming pool must be indicated.

8.5 FENCES AND ENCLOSURES

8.5.1 The provisions of this document shall control the design of barriers for swimming pools, spas, and hot tubs. These design controls are intended to provide protection against potential drownings and near drownings by restricting access to swimming pools, spas, and hot tubs. Requirements can be found in Appendix A.

- 8.5.2 A wall of a dwelling or other structure is permitted to serve as part of the enclosure provided that there is no direct access, such as a door, from the dwelling to the pool.
- 8.5.3 All filters, pumps, chemical feeding apparatus, and other mechanical equipment shall be secured and protected by an appropriate enclosure separate and apart from the enclosure of the swimming pool.

8.6 Overflow Gutters

- 8.6.1 Overflow gutters extending completely around a swimming pool shall be provided on all pools having a water surface area of 4,000 square feet or more.
- 8.6.2 The gutter system shall be designed to continuously remove water from the top of the pool at a rate equal to at least fifty (50) percent of the recirculation rate required to meet an eight (8) hour turnover time.
- 8.6.3 Gutter drainage shall be returned to the recirculation system on the influent side of the filters and provisions shall be made to discharge gutter drainage to waste without passing through the filters.
- 8.6.4 A gutter system shall be designed to meet the following additional requirements:
 - a) provide effective skimming action;
 - b) prevent waters that have entered the system from being washed back into the pool;
 - e) present no accident hazard to bathers;
 - d) provide for easy inspection and cleaning; and
 - e) provide an acceptable handhold for bathers.
- 8.6.5 Nothing in this section shall preclude the use of roll-out or deck level type swimming pools. Such designs shall conform to the general provisions relating to surface overflow system. The design of the eurb and handhold shall conform to acceptable standards, and must meet the approval of the Licensing Agency.

8.7 Surface Skimmers

- 8.7.1 Skimmers of an approved design are permitted in swimming pools having a water surface of less than four thousand (4,000) square feet.
- 8.7.2 A surface skimmer system shall meet no less than the following requirements:
 - a) The piping and other pertinent components shall have the capacity to remove water from the pool at a recirculation rate of least equal to eight (8) hour pool water turnover time.
 - b) In an indoor pool, one (1) skimmer shall be provided or each six hundred (600) square feet or fraction thereof of pool water surface and the weir loading shall not exceed three (3) gallons per minute per linear inch of adjustable weir length.
 - e) In an outdoor pool, one skimmer shall be provided for each four hundred (400) square feet or

- fraction thereof of pool water surface area and the weir loading shall not exceed 2.5 gallons per minute per linear inch of adjustable weir length.
- d) Skimmers shall be so located to provide as effective skimming of the entire water surface with minimum interference and short circuiting.
- e) Each skimming device shall be equipped with an equalizer pipe located at least one foot below the lowest skimmer overflow level or other device to prevent air lock in the skimmer suction line.
- f) Each skimming device shall be equipped with an easily removable and cleanable basket or screen through which pool surface water must pass.

8.8 Deck and Walkway

- 8.8.1 A continuous unobstructed deck or walkway at least four (4) feet wide excluding the width of the coping or the interior portion of a gutter shall extend completely around swimming pools. The walkway or deck shall be immediately adjacent to the pool.
- 8.8.2 The walkway behind the diving equipment shall be no less than three (3) feet.
- 8.8.3 The deek or walkway shall be constructed of concrete, non-slip tile or other equally impervious material with a smooth, but non-slip, easily cleanable surface.
- 8.8.4 All decks and walkways shall be sloped at a grade of approximately 1/4 inch per foot. Decks shall be sloped to effectively drain water to deck drains.

8.9 Ladders, Steps and Stairs

- 8.9.1 A minimum of one ladder must be installed within each seventy five (75) feet of pool perimeter or fraction thereof. There shall be at least one ladder located at the deep end of the pool and another at the shallow end.
- 8.9.2 If recessed step holes are provided in lieu of a ladder, they shall be slip resistant and shall pitch slightly toward the pool to prevent the accumulation of dirt. A suitable handrail extending above and returning to the horizontal surface of the deck, curb, or coping, shall be provided at each side of the ladder or stepholes.
- 8.9.3 Stairs may be used in lieu of ladders at the shallow end provided they are slip-resistant and a suitable handrail is provided at one side or in the center of the stairs. The stairs shall be recessed if the pool is designed for competitive swimming.

8.10 Handhold

8.10.1In the absence of a gutter designed to serve as a handhold for bathers, a bull nose coping or other satisfactory handhold shall be afforded bathers on all pool sidewalls. Handholds shall be no more than nine (9) inches above the normal pool water level.

8.11 Lighting, Ventilation & Electrical Requirements

8.11.1 All electrical wiring for swimming pools shall conform to the provisions of the current edition of the National Electric Code Handbook of the National Fire Protection Association and the Electrical Code of the State of Rhode Island.

- 8.11.2 All indoor swimming pool equipment, rooms, bath houses, dressing rooms, shower rooms, and toilet spaces shall be ventilated adequately either by natural or mechanical means, or by a combination of natural and mechanical means.
- 8.11.3 The pool and deck areas must have adequate illumination.

8.12 Diving Area

8.12.1 The dimensions of the pool in the diving area shall conform to the following:

Heights of Board	Minimum Water Depth	Min. Pool Width
Above Maximum	at End of Board and	at End of Board
Water Level	12 Feet Beyond	and 12 Feet Beyond
0.0 - 2.0 feet	8 1/2 feet	20 feet
2.1 - 3.3 feet	10 feet	24 feet
3.4 - 10 feet	12 feet	30 feet

- 8.12.2 A minimum horizontal separation of ten (10) feet shall be provided between diving boards.
- 8.12.3 At least fifteen (15) feet of unobstructed headroom shall be provided above diving boards.
- 8.12.4 Handrails shall be provided at all steps and ladders leading to diving boards or platforms more than three (3) feet above the pool water level. Platforms and diving boards which are over three (3) feet high shall be equipped with guard rails.

8.13 Swimming Pool Slides

8.13.1 Swimming pool slides which may be installed at a swimming pool shall be manufactured in accordance with the requirements of the U.S. Consumer Product Safety Commission and shall be so labeled; and all such slides shall be installed in accordance with requirements of the U.S. Consumer Product Safety Commission and with the manufacturer's instructions.

8.14 Recirculation System and Equipment

- 8.14.1 A swimming pool shall be equipped with a recirculation system to permit treating the pool water. A recirculation system shall consist of one or more filters with appurtenances, pump(s), chemical feeder(s) and a rate of flow indicator.
- 8.14.2 A swimming pool recirculation system shall be designed to treat the entire pool water volume in eight (8) hours or less.
- 8.14.3 Recirculation systems equipped with a water heater shall have a fixed thermometer in place on the discharge side of the heater.

8.14.4 Filters

a) Pressure Sand Filters:

i. the filtration rate of a pressure sand filter or equivalent media shall not exceed twenty six (26) gallons per minute per square foot of filter bed surface area;

ii. Pressure sand filters shall be equipped with influent and effluent pressure gauges or a compound pressure gauge, and an air relief valve at the high point of the filter.

b) Diatomaceous Earth Filters:

- i. The filter rate of diatomaceous earth filters shall not exceed 2.0 gallons per minute per square foot of effective filter area without continuous body feed and 2.5 gallons per minute per square foot of effective filter area with continuous body feed.
- ii. Provision shall be made for introducing filter aid to form a precoat evenly over the filter elements when a filter is put into initial operation and after each cleaning. Pressure diatomaceous earth filters shall be equipped with a precoat pot for this purpose.
- iii. The filter plant shall be provided with such pressure, vacuum, or compound gauges as are required to indicate the condition of the filter. An air relief valve shall be provided at the high point of a pressure diatomaceous earth filter.
- iv. In vacuum filter installation, an adjustable high vacuum automatic shut off shall be provided to prevent damage to the pump by cavitation.

e) Cartridge Filters

- i. Cartridge filters shall be operated at a filter rate not to exceed the design rate or a maximum of 0.375 gallons per minute per square foot of surface area.
- ii. Cleaning of cartridge filters must be in accordance with the manufacturer's recommendations.
- iii. One complete spare set of cartridges shall be available at all times to facilitate cleaning.

8.14.5 <u>Disinfectant Apparatus</u>

- a) The recirculation system for swimming and therapeutic pools shall be equipped with a positive displacement type solution feeder to apply, continuously, a disinfectant to the pool water being recirculated.
- b) Disinfectant equipment shall have a minimum capacity to supply at least the equivalent of one (1) pound of chlorine per eight (8) hours for each ten thousand gallons of pool water.

8.15 Main Outlets and Drains

- 8.15.1 A main drain outlet shall be provided at the deepest point of the swimming pool. At least two outlets spaced not more than thirty (30) feet apart shall be provided if the width of the swimming pool at its deepest point exceeds thirty (30) feet. Two (2) outlet pipes the diameters of which shall be equal shall be required for spas and hot tubs.
- 8.15.2 If the suction outlet system, such as a filtration system, booster system, automatic cleaning system, solar system, etc., has a single suction outlet, or multiple suction outlets which can be isolated by valves, each suction outlet shall protect against bather entrapment by either.
 - a) an antivortex cover

- b) a twelve inch by twelve inch (12" x 12") grate or cover
- e) other means.

8.16 Treated Water Inlets

- 8.16.1 As a minimum, one treated water inlet shall be provided for each two hundred fifty (250) square feet of swimming pool water surface area or fraction thereof in indoor swimming pools and one such inlet shall be provided for each two hundred (200) square feet of swimming pool water surface area or fraction thereof in outdoor pools.
- 8.16.2 A minimum number of two (2) inlets shall be provided for any swimming pool.
- 8.16.3 One of the required inlets shall be located in the recessed stairs section of the swimming pool, where such stairs are provided.
- 8.16.4 Inlets shall be spaced and located to produce uniform water circulation.

8.17 <u>Vacuum Cleaning</u>

8.17.1 Provision shall be made for vacuum cleaning the bottom of the swimming pool. The suction from the recirculation pumps and sidewall vacuum or skimmer fittings may be utilized for this purpose.

8.18 Bathhouses and Sanitary Facilities

- 8.18.1 Separate dressing, toilet, shower and lavatory facilities for each sex shall be made available for the exclusive use of patrons in a structure (bath house) adjacent to the swimming, except however, for hotels, apartment buildings, condominiums and such other similar type establishments, provided however, that private sanitary facilities are available within three hundred feet (300 ft.) from the swimming pool area.
- 8.18.2 The bathhouses shall be of ample size the layout of the bathhouses shall be so designed to facilitate the routing of bathers from the dressing area through the toilet, shower and lavatory facilities. Furthermore, the bathhouses shall be well lighted and so planned that good sanitary conditions can be maintained. Hose bib connections and floor drains shall be provided in convenient locations to facilitate cleaning the rooms in which these facilities are located.
- 8.18.3 Hot and cold running water shall be piped to shower and lavatory fixtures and liquid soap in suitable dispensing containers shall be provided.
- 8.18.4 The minimum number of lavatories and water closets provided for each sex shall be equal to 1 per 60 bathers based on the maximum bather load.
- 8.18.5 The minimum number of showers provided for each sex shall be equal to 1 per forty (40) bathers based on the maximum bather load.
- 8.18.6 Urinals for male bathers may be substituted for up to one-third the number of water closets required where more than one water closet is required.
- 8.18.7 Notwithstanding the above provisions, the number of fixtures required may be increased for swimming pools at schools or other locations where scheduling of pool use warrants special

consideration.

8.19 Bather Load

- 8.19.1 The maximum number of bathers permitted within a swimming pool enclosure at one time shall not exceed the number determined as follows:
 - a) one bather for each 20 square feet of pool water surface area where the water is less than five feet deep.
 - b) one bather for each 25 square feet of pool water surface area where the water is more than five feet deep.
 - e) Three hundred square feet of pool water surface area shall be reserved around each diving board or platform. This area shall not be included in determining the bather load capacity.
- 8.19.2 The Licensing Agency may make additional allowances for the numbers of bathers in eases where an extensive pool deck area is used by patrons for lounging or sun bathing or may decrease the allowable number taking into consideration the age and swimming ability of the bathers.

8.20 Lifeline

- 8.20.1 Provisions shall be made to place a lifeline with colored floats across the width of the swimming pool at least two feet on the shallow end of the break between the diving well and the swimming area.
- 8.20.2 In no case shall the location of the lifeline floats be placed across the width of the swimming pool at more than five (5) feet from the shallow end of the swimming pool.

Section 9.0 WADING POOLS

- 9.1 <u>Construction Requirements</u>: the construction requirements for wading pools shall be consistent with the construction requirements for swimming pools pursuant to section 8.0 herein with the exception however of decks and recirculation system as follows:
 - 9.1.1 <u>Decks</u>: wading pools shall be separate and physically set apart from beginning of shallow areas of swimming pools by at least six (6) feet of deck. Where a wading pool is adjacent to any deep water area, a minimum four (4) vertical foot barrier shall be installed separating the two pools with a self closing and self latching gate.
 - 9.1.2 <u>Recirculation System:</u> wading pools shall meet the requirements of section 8.14.1 herein and shall be designed to treat the entire pool water volume at least once every two (2) hours.

Section 10.0 HOT TUBS AND SPAS

- 10.1Requirements for hot tubs and spas pertaining to Construction Materials, Structural Design and Stability, Water Depth Markings, Fences and Enclosure, Surface Skimmers, Steps and Stairs and Handrails, Lighting, Ventilation and Electrical Requirements and Bathhouses and Sanitary Facilities shall be identical to the requirements for swimming pools of section 8.0 herein with the exception however of the following:
 - 10.1.1 <u>Decks & Walkways</u>: hot tubs and spas shall have a four (4) foot deck around the tub and spa or a four foot deck on two sides of tub and spa, and meet all other requirements of section 8.8 herein.

10.1.2 Heater & Temperature:

- a) Heaters used in spas and hot tubs shall have a seal of approval from a standards testing agency such as the American National Standards Institute (ANSI-Z-21.56) or the Underwriters Laboratory (UL 1261).
- b) Electrically operated heaters shall comply with current National Electrical Code of the National Fire Protection Association.
- e) Heaters shall be equipped with a thermostatic control for the water temperature and shall be set at a temperature not to exceed 105°F.

10.1.3 Inlets & Drains:

Every hot tub and spa shall be equipped with inlets which shall be an integral part of the recirculation system and shall be adequate in design, and location to insure uniform distribution of filtered conditioned and disinfected water throughout the hot tub and spa without the existence of dead spots.

- a) Main outlets and drains:
 - i. A means shall be provided to drain the hot tub or spa which may include bottom drains, eirculatory drains or any other approved drains.
 - ii. Outlets shall be of such design as to prevent physical entrapment of fingers, toes, etc.

10.1.4 Recirculation System & Equipment

The requirements for the recirculations system and equipment shall be the same as the requirements for swimming pools of section 8.14 herein with the exception of the following:

a) The recirculation system and equipment shall be sized to turn over the entire pool water capacity at least once every thirty (30) minutes.

PART III GENERAL REQUIREMENTS FOR WATER SUPPLY AND WASTE WATER FOR SWIMMING AND WADING POOLS, HOT TUBS AND SPAS

Section 11.0 WATER SUPPLY

- 11.1 The water supply serving swimming or wading pools, hot tubs or spas, and their related plumbing fixtures shall meet the approval of the Licensing Agency. The discharge end of a pipe delivering water from a drinking water system to swimming or wading pools, hot tubs or spas shall terminate at least two (2) pipe diameters above the maximum elevation of the water in the pool. Piping from a drinking water system shall not be physically connected to a swimming or wading pool, hot tub or spa recirculation system. The water must be discharged into a swimming or wading pool, hot tub or spa through an air gap equivalent to at least two (2) pipe diameters.
- 11.2 No plumbing connection shall be made which might permit water from the swimming or wading pool, hot tub or spa recirculation system to enter the drinking water system.

Section 12.0 WASTE WATER DISPOSAL

- 12.1 Waste water from the operation of swimming or wading pools, hot tubs or spas, except water resulting from draining such pools, hot tubs or spas, shall be discharged into a sanitary sewage system through an air gap equivalent to at least two (2) pipe diameters. If no such sewer system is available, the pools, hot tubs or spas may be served by an individual sewage disposal system (ISDS) approved by the Department of Environmental Management.
- 12.2 The content of a swimming or wading pool, hot tub or spa may be emptied by draining into a natural water course directly or indirectly through a storm water system. Prior to doing so, a permit must be obtained from the Department of Environmental Management.
- 12.3 There shall be no direct physical connection between any part of a swimming and wading pool, hot tub or spa or its recirculation system and a sanitary sewer or subsurface sewage disposal system.

PART IV REQUIREMENTS FOR THE OPERATION OF SWIMMING AND WADING POOLS, HOT TUBS AND SPAS

Section 13.0 GENERAL SANITATION REQUIREMENTS

- 13.1 The area, room, and/or enclosure of a swimming or wading pool, hot tub or spa, shall be kept in good repair and shall be maintained in a clean and sanitary condition at all times.
- Dressing, shower, toilet and equipment rooms, including fixtures and equipment shall also be kept in good repair and working order, and shall be maintained in a clean and sanitary condition.
- 13.3 The floors of dressing, toilet, shower rooms and passageways shall be well drained and shall be treated daily with a suitable fungicide.
- 13.4 Hot Tubs & Spas: the water in Hot Tubs and Spas shall be drained completely no less than once a month, preferably once a week.

Section 14.0 CHEMICAL AND BACTERIOLOGICAL ANALYSES OF WATER

14.1 The Department of Health shall cause to be made chemical and bacteriological analyses of samples of water from each swimming and wading pools, hot tubs and spas, and shall report its findings thereon to the person maintaining such pools, hot tubs or spas. The report shall state whether or not the condition of such water is such as to be detrimental to the health and safety of the users. The first analyses of samples of water from a newly opened swimming or wading pool, hot tub or spa, shall be made within thirty (30) days after the receipt of an application for a license for such pool.

14.2 Chemical Standards of the Water:

- 14.2.1 A swimming or wading pool, hot tub or spa, while in use, shall be continuously disinfected by a chlorinated agent which imparts an easily measured free available residual effect.
- 14.2.2 Testing equipment which is capable of measuring the maximum and minimum chemical standards stated herein must be provided including a fresh supply of test reagents.
- 14.2.3 Chemicals, other than those used for the proper maintenance of the pool, shall not be added to the pool, its recirculation system without the written approval of the Licensing Agency.
- 14.2.4 The owner will be responsible for any monitoring deemed necessary by the Licensing Agency which results from the addition of chemicals other than those used for pH and disinfectant.

14.2.5 Swimming and Wading Pools

Free chlorine, combined chlorine, and pH values shall be continuously maintained within the following ranges:

	Minimum	Ideal	Maxi	imum	
			Indoor	Outdoor	
			Poo	ls	
Free chlorine residual (ppm)*	0.7		2.0	3.0	
Combined chlorine (ppm)*	none	none	0.2**	0.2**	
₽H	7.2	7.4 - 7.6	7.8	7.8	

^{*} ppm means parts per million

14.2.6 Hot Tubs & Spas

The following temperatures, disinfectant levels and chemical values shall be continuously maintained within the following ranges for hot tubs and spas:

	Minimum	Ideal	Maximum
Temperatures (degrees Fahrenheit)			105
Free chlorine residual(ppm)*	1.0		5.0
Combined chlorine (ppm)*	none	none	0.2**
pH	7.2	7.4 - 7.6	7.8

^{*} ppm means parts per million

14.2.7 Sampling, Testing and Record Keeping

- a) <u>Swimming and Wading Pools</u>: Operators of swimming and wading pools shall sample the water content of the pool each day it is in operation for the parameters set forth in section 14.2.5 above.
- b) <u>Hot Tubs and Spas</u>: Operators of hot tubs and spas shall test the pH and temperature for hot tubs and spas each day they are in operation for the parameters set forth in section 14.2.6 above.
- e) Results of all analyses and testings shall be recorded by the operator and the records made available to the Licensing Agency. Such records shall be maintained for a period of no less than one year.

14.3 Bacteriological Quality of the Water

- 14.3.1 Water samples of swimming and wading pools, hot tubs and spas, shall be collected whenever deemed necessary. No sample shall contain more than 200 bacteria per milliliter as determined by the standard thirty five degree C. (35°C) agar plate count.
- 14.3.2 Samples collected for microbiological examination testing shall be conducted in accordance with procedures set forth in the current "Standard Methods for the Examination of Water and Wastewater", of the American Public Health Association.

^{**} Remedial action shall be taken if combined chlorine exceeds 0.2 as it will result in reduced chlorine efficacy.

Alternate disinfection systems require a variance to these regulations as indicated in Section 17.0

^{**} Remedial action shall be taken if combined chlorine residuals exceed 0.2 ppm as it will result in reduced disinfectant efficacy.

14.3.3 Hot tubs & Spas

Pseudomonas aeruginosa: Examinations may be made for bacteria of the pseudomonas group. Whenever such examinations are made, not more than five (5) organisms per 100 milliliters of water should be present.

Section 15.0 CLARITY OF WATER

15.1 The water of the swimming and wading pools, hot tubs and spas, shall be sufficiently clear so that the main drain grate(s) and the bottom of the pool and hot tub and spas are clearly visible when in use.

Section 16.0 GENERAL SAFETY REQUIREMENTS

- 16.1 Licensed swimming and wading pools, hot tubs and spas, shall meet the lifeguard requirements and such other related safety and first aid requirements in accordance with the statutory and regulatory provisions of the Department of Environmental Management.
- 16.2 All entrances leading to a swimming and/or wading pool, hot tub or spa, shall be secured with a locking device whenever the pool and hot tub or spa is closed to bathers.
- 16.3 Precautions shall be taken to protect personnel from injury when handling acids and strong oxidizing agents. Such chemicals shall be stored in a secure and safe manner.
- 16.4 Owners and/or operators of swimming and wading pools, hot tubs and spas, shall establish written policies governing no less than the following:
 - a) any person with an infectious and/or communicable disease shall be prohibited from utilizing the swimming and wading pool, hot tub and spa, including persons with open lesions, blisters and/or cuts or rashes:
 - b) prohibiting spitting, spouting water, and blowing the nose in the swimming or wading pool, hot tub or spa;
 - e) prohibiting running, boisterous, or rough play in the swimming or wading pool, hot tub or spa, and/or surrounding areas;
 - d) prohibiting of pets and other animals in the swimming or therapeutic pool except for seeing eyed dogs accompanied by a blind person;
 - e) establishing safety provisions pertaining to the use of swimming pool slides and diving boards;
 - f) cleansing shower baths prior to entering swimming or wading pools, hot tubs or spas;
 - g) prohibiting food and drink within the swimming or wading pool or hot tub or spa enclosure except in designated areas; and
 - h) such other provisions as owners may deem necessary for the protection and safety of the bathers.
 - 16.6 In addition to the above, owners or operators shall:
 - a) post warning to users of hot tubs and spas regarding the advisability of pregnant women, individuals suffering from heart disease, diabetes and high or low blood pressure, persons using alcohol, anti-

- coagulants, anti-histamines, vaso-constrictor, vasodialators, stimulants, narcotics or tranquilizers to contact their physician regarding the appropriateness of their use of hot tubs and spas.
- b) permit the use of the hot tub or spa only for reasonable length of time, not to exceed fifteen (15) minutes.
- e) suggest bathers to shower and cool down prior to returning for another brief stay to prevent nausea dizziness and fainting.
- 16.7 The policies and warning sign governing the use of pools, hot tubs and spas by bathers as required above shall be posted in a conspicuous place in the swimming and wading pool, hot tub and spa area accessible to bathers.

PART V VARIANCE, VIOLATIONS AND SANCTIONS, PRACTICES AND PROCEDURES, AND SEVERABILITY

Section 17.0 VARIANCE PROCEDURE

- 17.1 The Licensing Agency may grant a variance either upon its own motion or upon request of the applicant from the provisions of any rules or regulations in a specific ease, if it finds that a literal enforcement of such provision will result in unnecessary hardship to the applicant and that such variance will not be contrary to the public interest, public health and/or health and safety of the public.
- 17.2 A request for a variance shall be filed by an applicant in writing setting forth in detail the basis upon which the request is made.
 - 17.2.1 Upon the filing of each request for variance with the Licensing Agency and within thirty (30) days thereafter, the Licensing Agency shall notify the applicant by certified mail of its approval or in the ease of a denial, a hearing date, time and place may be scheduled if the denial is appealed.

Section 18.0 VIOLATIONSAND SANCTIONS

18.1 Any person, other than a city or town, whether as principal or agent, employer or employee, who violates any of the provisions of this chapter, or any of the rules and regulations made by the department of health pursuant to this chapter, shall be punished by a fine of not more than fifty dollars (\$50.00) for each offense, and each day that any violation occurs shall constitute a separate and distinct offense.

Section 19.0 PROCEDURES AND PRACTICES

19.1 All hearings and reviews required under the provisions of the Act shall be held in accordance with the provisions of the rules and regulations promulgated by the Rhode Island Department of Health entitled, "Rules and Regulations Governing the Practices and Procedures Before the Rhode Island Department of Health."

Section 20.0 SEVERABILITY

20.1 If any provision of these rules and regulations or the application thereof to any swimming or therapeutic pool owner or circumstance shall be held invalid, such invalidity shall not effect the provisions or application of the regulations which can be given effect, and to this end the provisions of the regulations are declared to be severable.

SwimmingPools_Final_Sept2012.doc Wednesday, 26 September 2012

APPENDIX A

BARRIER FOR SWIMMING POOLS, SPAS AND HOT TUBS

REQUIREMENTS

Section I. Outdoor Swimming Pool

An outdoor swimming pool, including a hot tub or spa, shall be provided with a barrier which shall comply with the following:

- 1. The top of the barrier shall be at least 48 inches above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches measured on the side of the barrier which faces away from the swimming pool.
- 2. Openings in the barriers shall not allow passage of a 4 inch diameter sphere.
- 3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
- 4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members if less than 45 inches, the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1: inches in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1: inches in width.
- 5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches or more, spacing between vertical members shall not exceed 4 inches. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1: inches in width.
- 6. Maximum mesh size for chain link fences shall be a 13 inch square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to no more than 1: inches.
- 7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall be no more than 1: inches.
- 8. Access gates shall comply with the requirements of Section I, Paragraphs 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outwards away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches from the bottom of the gate, (a) the release mechanism shall be located on the pool side of the gate at least 3 inches below the top of the gate and (b) the gate and barrier shall have no opening greater than 2 inch within 18 inches of the release mechanism.
- 9. Where a wall of a dwelling serves as part of the barrier, direct access to the pool through the wall shall be limited to doors and windows which meet the following conditions:
 - A. Windows leading to the pool area shall have a latching device at least 54 inches above the floor.
 - B. Hinged doors leading to the pool area shall be self-closing and shall have a self-latching device. The

release mechanism of the self-latching device shall be located at least 54 inches above the floor.

C.Sliding doors or sliding screen doors leading to the pool area shall be self-closing and shall have a self-latching device or other barrier approved by the authority having jurisdiction. The release mechanism of the self-latching device shall be located at least 54 inches above the floor.

Section II. Indoor Swimming Pool

All walls surrounding an indoor swimming pool shall comply with Section I, Paragraph 9.

Section III. Prohibited Locations

Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to elimb the barriers.