

DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER AND RADIOLOGICAL PROTECTION DIVISION
PUBLIC SWIMMING POOLS

(By authority conferred on the department of environmental quality by sections 2226, 2233, and 12522 of 1978 PA 368, MCL 333.2226, 333.2233, and 333.12522)

PART 1. GENERAL PROVISIONS

R 325.2111 Definitions.

Rule 1. As used in these rules:

- (a) "Code" means 1978 PA 368, MCL 333.1101 et seq.
- (b) "Department" means the department of environmental quality.
- (c) "Diving pool" means a swimming pool that is deep enough throughout for diving as required by R 325.2133.
- (d) "Modification" means any alteration to a swimming pool that results in a change from previously approved construction.
- (e) "Poolside slide" means a short slide structure which is more than 4 feet in height, which is not regulated under R 408.814, which is located near the edge of a swimming pool, and which is used by swimmers to slide by gravity into a pool.
- (f) "River ride pool" means a swimming pool that is designed to convey means a swimming pool that is designed to convey swimmers with or without flotation devices around a closed loop channel using an artificially created current.
- (g) "Spa pool" means a swimming pool which is designed for use by more than 2 people at one time and which is not necessarily intended for swimming. A spa pool will typically have seating, agitation of the water, and water temperatures different than what is normal in pools for swimming.
- (h) "Special purpose pool" means a swimming pool that has design features which are not specifically covered in Part 2 of these rules.
- (i) "Swimming pool" or "pool" means a public swimming pool as defined in section 12521 of the code. The following are examples of swimming pools:
 - (i) Cold plunge pools.
 - (ii) Diving pools.
 - (iii) Hot tubs.
 - (iv) Scuba diving pools.
 - (v) Spa pools.
 - (vi) Training tanks wading pools.
 - (vii) Water slide pools.
 - (viii) Wave pools.
 - (ix) Other special purpose pools.
- (j) "Wading pool" means a swimming pool that is shallow enough throughout for wading.

(k) "Water slide pool" means a swimming pool that includes 1 or more flumes in which bathers are transported by moving water to a landing area and which is used only to exit the water slide.

(l) "Wave pool" means a swimming pool that is equipped to generate waves.

History: 1979 AC; 1983 AAC; 2001 AAC.

R 325.2113 Plans and specifications; construction permit application.

Rule 3. (1) Plans and specifications submitted for a construction permit for a new swimming pool or modification of an existing swimming pool shall meet all of the following requirements:

(a) Be prepared by, and bear the seal of, a professional engineer or architect licensed in this state if a new swimming pool and related facilities or a modification costs \$15,000.00 or more. A person shall obtain a construction permit under section 12525 of the code regardless of the project cost.

(b) Be submitted in triplicate to the department and be accompanied by completed construction permit application forms as prescribed and provided by the department.

(c) Be accompanied by the fee prescribed by the code payable to: "State of Michigan."

(2) Plans and specifications submitted for a construction permit for a new swimming pool shall meet both of the following requirements:

(a) Include a plot plan showing all of the following:

(i) Plan north or true north.

(ii) Property boundaries and location description.

(iii) Adjacent streets.

(iv) Pertinent buildings on the site.

(v) Pertinent site grades, including floodplain contour, if applicable.

(vi) Utility lines.

(b) Show, in detail, the swimming pool and related facilities areas, including all of the following:

(i) The swimming pool enclosure and enclosure entrances.

(ii) The enclosure design, door or gate designs, and entrance hardware.

(iii) The walkway and deck materials, finishes, and slopes.

(iv) The swimming pool tank and related facilities.

(v) The swimming pool water treatment and recirculation equipment and piping.

(vi) Dressing rooms, locker rooms, shower rooms and toilet rooms.

(vii) Storage rooms.

(viii) Offices.

(ix) Mechanical equipment rooms.

(x) The source of, and basis of design for, the water supply.

(xi) Wastewater disposal system and the basis of design, including stormwater discharges.

(3) Plans and specifications submitted for a construction permit for modification of an existing swimming pool shall show both the proposed modifications and the pertinent existing facilities.

(4) If plans and specifications are submitted to the department, then an applicant shall concurrently submit 1 set of plans and specifications to the appropriate local health department.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2113a Compliance with state or local code or requirement.

Rule 3a. Compliance with these rules does not relieve a pool owner from complying with a state or local code or requirement that is not in conflict with these rules.

History: 2001 AACCS.

R 325.2114 Design and construction variances.

Rule 4. (1) The department may grant a variance from part 2 of these rules if the department determines that the variance will not affect the safe and healthful operation of the swimming pool and that strict compliance will cause unusual practical difficulties and hardships or will conflict with a special purpose intended for the pool.

(2) A person who files a request for a variance from these rules shall do so in writing. The request shall state the specific reasons for the variance and shall include adequate proof that an item, material, feature, or method will perform the intended function so as to produce a safe and healthful swimming pool.

(3) The department shall review the variance request and take either of the following actions:

(a) Grant the variance in writing, including any specific terms, conditions, and limitations.

(b) Deny the variance in writing and state the specific reasons for denial.

(4) A swimming pool which is not in compliance with the specific provisions of these rules on their effective date, but which is in compliance with the rules in effect when the pool was installed and which is in good repair, is exempt from the provisions of these rules that require major structural or mechanical changes until pertinent modifications are made. If a swimming pool is modified, the pool owner shall bring the portion modified into compliance with applicable provisions of these rules, unless a variance is granted by the department.

(5) This rule does not preclude the department from requiring changes where necessary to correct a threat to public health or an unsafe condition associated with a swimming pool. The pool owner shall establish a schedule of compliance for any required changes that is acceptable to the department or local health department.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2115 Operation permit application.

Rule 5. (1) An applicant for an operation permit shall submit an application to the department on the forms prescribed and provided by the department.

(2) An applicant shall submit the fee prescribed by section 12527a of the code together with the application. An applicant shall make payment payable to: "State of Michigan."

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2116 Violation of code or rules; notice of noncompliance; stop-work order.

Rule 6. (1) If a representative of the department or of a local health department inspects a swimming pool and finds a violation of the code or these rules, then the department or local health department representative shall issue a written notice of noncompliance to the owner or the owner's representative that specifies the corrective action to be taken and shall allow an appropriate time period for correction.

(2) If construction is being performed contrary to the code or these rules, then the department or local health department representative may issue a written stop-work order. If a stop-work order is issued, the construction shall stop, except for work that is necessary to correct an unsafe condition.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2117 Closing of swimming pools; reasons.

Rule 7. (1) A representative of the department or of a local health department may order the owner or operator of a swimming pool to close the pool and prohibit any person from using it, until correction, for any of the following reasons:

(a) A condition of the swimming pool equipment, structure, area, or enclosure that jeopardizes the health or safety of the persons using or operating the pool.

(b) The lack of properly functioning equipment or proper material for recirculating, treating, or testing the swimming pool water.

(c) The lack of supervisory personnel, as required by R 325.2197, or lifeguards, as required by R 325.2198.

(d) The presence of a pollutant or of a hazardous object or substance in the swimming pool.

(e) Failure to meet a water quality standard prescribed by R 325.2194 or R 325.2195.

(f) Failure to operate and maintain the swimming pool as prescribed by R 325.2191 to R 325.2199.

(g) Failure to comply with the terms and provisions of an order or schedule of compliance.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2118 Closing of swimming pools; procedure.

Rule 8. (1) The department or local health department shall issue an order under R 325.2117 in writing and shall ensure that the order complies with all of the following provisions:

(a) States that the pool shall close immediately.

(b) Specifies the corrective action necessary to bring the pool back into compliance.

(c) Is served upon the owner, operator, owner's representative, or person in charge of the swimming pool. The person on whom the order is served shall close the swimming pool immediately and shall prohibit any person from using it. The order may require the owner or operator or owner's representative to post 1 or more signs to inform any person that the swimming pool is closed until further notice.

(2) After the specified corrective action has been taken, the owner or operator or owner's representative shall notify the agency issuing the closing order.

(3) If upon reinspection the corrective action has not been taken, then the owner or operator shall keep the swimming pool closed and out of use until corrective action has been taken and the swimming pool has been reinspected and approved.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2118a Reopening inspections.

Rule 8a. (1) Before the reopening of a swimming pool for seasonal use or for use after the expiration of an operation permit, an owner or operator shall prepare the swimming pool facilities for use according to all of the following provisions:

(a) All violations of the code or these rules shall be corrected.

(b) The swimming pool water shall meet the water quality standards prescribed by R 325.2194.

(c) The owner or operator shall notify the department or local health department when the swimming pool is ready for use.

(2) A representative of the department or local health department may inspect the facilities before authorizing seasonal use of a swimming pool.

(3) A representative of the department or local health department shall inspect the facilities before authorizing the use of a pool after the expiration of an operation permit.

(4) If a reopening inspection reveals a condition listed in R 325.2117, then a representative of the department or a local health department may order the owner or operator of the swimming pool to prohibit any individual from using the pool until adequate corrections are made.

History: 1983 AACCS; 2001 AACCS.

R 325.2118b Swimming pools not in use.

Rule 8b. The owner of a swimming pool which is not in use or for which an operation permit is not in effect shall maintain the pool in a condition that prevents its creating a hazard to health or safety.

History: 1983 AACCS; 2001 AACCS.

R 325.2119 Rescission.

Rule 9. The rules entitled "Construction and Alteration of Public Swimming Pools," being R 325.391 to R 325.395 of the Michigan Administrative Code and appearing on page 2254 of the 1954 volume of the Code, and the rules entitled "Operation and Use of Public Swimming Pools," being R 325.401 to R 325.406 of the Michigan Administrative Code and appearing on pages 2254 and 2255 of the 1954 volume of the Code are rescinded.

History: 1979 AC.

PART 2. CONSTRUCTION

R 325.2121 Sites.

Rule 21. The site for a swimming pool shall meet all of the following requirements:

- (a) Have pertinent public utilities available or have an on-site water supply and on-site sewage disposal system approved by the department or local health department.
- (b) Not be detrimental to safe access to the swimming pool or to the safe and healthful use of the swimming pool.
- (c) Be accessible by vehicles.
- (d) Have drainage that is adequate to prevent flooding, damage, and a nuisance.
- (e) Not be detrimental to the proper operation and maintenance of the swimming pool.
- (f) Avoid pollution of the swimming pool.
- (g) Allow for the swimming pool to be safely emptied when necessary.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2122 Construction shapes, materials, surfaces, and loads.

Rule 22. (1) A swimming pool owner shall ensure that the pool and appurtenances are shaped and arranged so that the maintenance of safe and sanitary conditions and the recirculation of the water are not impaired. Nothing shall extend into or above a swimming pool tank so as to create a safety hazard.

(2) A swimming pool owner shall ensure that a pool and appurtenances are constructed of materials that are inert, nontoxic to humans, impervious, durable, and strong enough to withstand structural stresses.

(3) A pool owner shall ensure that a finished surface of a swimming pool wall or floor does not have sharp edges, open cracks, or open joints and is slip-resistant, easily cleanable, nonabsorbent, and light-colored, except that a dark marking may be inserted against a light background.

(4) A swimming pool owner shall ensure that a pool tank is designed and constructed to withstand all anticipated loadings for both full and empty conditions. If a swimming pool tank is subject to external hydrostatic pressure, then the pool owner shall provide means to relieve the pressure.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2123 Walls, floors, ledges, and underwater seating.

Rule 23. (1) Where the water depth is 6 feet or less, a swimming pool owner shall ensure that a swimming pool wall meets 1 of the following provisions:

- (a) Is vertical.
- (b) Slopes uniformly down to the point of curvature at not more than 1 horizontal in 5 vertical.
- (c) Falls entirely within a plane sloped 1 horizontal in 5 vertical from the waterline down to the point of curvature where the wall cannot slope uniformly due to the necessary structural support of the upper wall.

(2) Where the water depth is more than 6 feet, a swimming pool owner shall ensure that a pool wall meets 1 of the following requirements:

(a) Is vertical.

(b) Is vertical to a water depth of not less than 64 inches and then curves to the floor with a radius of not more than the difference between the floor depth at that point and the depth at the point of curvature.

(c) Is vertical to a water depth of not less than 64 inches and then slopes down to the floor at 1 horizontal in 2 vertical or steeper.

(d) Is vertical to a water depth of not less than 68 inches and then slopes down to the floor at 1 vertical in 2 horizontal or less steep for a horizontal distance of not more than 6 feet from the pool wall. Add 1 inch to the vertical wall water depth for each additional 2 inches of total water depth deeper than 6 feet.

(e) Slopes uniformly down to a water depth of not less than 6 feet at not more than 1 horizontal in 5 vertical.

(f) Falls entirely within a plane sloped 1 horizontal in 5 vertical from the waterline down to a water depth of not less than 6 feet where the wall cannot slope uniformly due to the necessary structural support of the upper wall.

(3) A swimming pool owner shall ensure that the junction between a pool wall and the floor is coved with a radius according to the following requirements, as applicable:

(a) Not less than $\frac{1}{2}$ of an inch.

(b) Not more than 8 inches where the water depth is 6 feet or less.

(c) Not more than 75 inches where the water depth is more than 6 feet.

(4) A swimming pool owner shall ensure that the entire swimming pool floor slopes down toward the main outlets according to the following requirements:

(a) Where the water depth is 4 feet or less, the swimming pool floor shall be sloped uniformly at not more than 1 vertical in 12 horizontal, where the water depth is 4 feet or less, except on the deeper side of a change of slope.

(b) Where the water depth is between 4 feet and 6 feet, the floor shall be sloped uniformly at not more than 1 vertical in 3 horizontal on the deeper side of a change of slope to a water depth of not more than 6 feet.

(5) Where the water depth is less than 6 feet, a swimming pool owner shall plainly mark the pool bottom at a change of floor slope with a color contrasting from the background color to allow the change of slope to be clearly visible. A swimming pool owner shall also extend the marking vertically up each sidewall at the change of slope.

(6) The department may approve other floor slopes for special purpose pools, for scuba diving pools, or for the transition from the side of a diving area to a more shallow area.

(7) A swimming pool owner shall ensure that a ledge does not protrude into a pool unless it is essential to support an upper wall. If a ledge is provided, then a swimming pool owner shall ensure that the ledge meets all of the following requirements:

(a) Is not more than 4 inches in width.

(b) Slopes downward from the wall.

(c) Is designed to prevent its use as a walkway.

(d) Is marked with a color contrasting from the background color to allow the ledge to be clearly visible.

(8) A swimming pool owner shall ensure that underwater seating at a swimming pool other than a spa pool meets all of the following requirements:

- (a) Is located where the water depth is 4 feet or less.
- (b) Is located in a recessed area that provides for the safety of swimmers.
- (c) The front edge of the seating is plainly marked in a color contrasting from the background color to allow the seat to be clearly visible from in the pool and on the walkway near the seat.
- (d) The walkway adjacent to the underwater seating is marked in a manner that warns of the location of the submerged seat.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2124 Handholds.

Rule 24. (1) A swimming pool owner shall ensure that a swimming pool, other than a spa pool, wading pool, or a water slide pool, has a continuous handhold that is not more than 6 inches above the water surface.

(2) A swimming pool owner shall ensure that a spa pool has handholds that are not more than 4 feet apart and not more than 6 inches above the water surface.

(3) A swimming pool owner shall ensure that a water slide pool has a continuous handhold, except at the flume entry into the pool.

(4) A swimming pool owner shall ensure that a handhold provides a positive, safe, and slip-resistant grip and allows persons using the swimming pool to easily hold onto the edge of the pool.

History: 2001 AACS.

R 325.2125 Water supplies.

Rule 25. (1) A swimming pool owner shall ensure that the water serving a swimming pool and all plumbing fixtures are obtained from a type I public water supply, if available. If a type I water supply is not available, then a swimming pool owner shall ensure that water is obtained from a supply that meets the requirements for type II public water supplies. The water supply types are classified in R 325.10502.

(2) A swimming pool owner shall ensure that the supply of water is adequate for service to all plumbing fixtures and for furnishing the swimming pool with not less than 1 gallon per minute per 1,500 gallons of the swimming pool volume. A swimming pool owner shall ensure that water at a temperature of not less than 90 degrees nor more than 110 degrees Fahrenheit is supplied to each required shower and lavatory.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2126 Water supply backflow.

Rule 26. (1) A swimming pool owner shall ensure that a potable water supply system that serves a swimming pool and all plumbing fixtures is protected against backflow. A swimming pool owner shall ensure that potable water which is introduced into the swimming pool or recirculation system is supplied through permanent piping and either of the following:

(a) An acceptable air gap consisting of an unobstructed vertical distance through the atmosphere of not less than 2 diameters of the water supply pipe between the lowest free-flowing discharge of the water supply pipe and the overflow level of the receiving pipe, tank, or vessel.

(b) An approved reduced pressure zone backflow preventer which is installed where it is readily accessible for inspection and maintenance, which is not subject to flooding, and which does not have a direct connection between the drain port and a wastewater system.

(2) A swimming pool owner shall ensure that a water supply fill spout is located so that it is not a safety hazard.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2127 Wastewater disposal systems.

Rule 27. (1) A swimming pool owner shall ensure that a swimming pool has a wastewater disposal system that serves the entire swimming pool facility. A swimming pool owner shall ensure that the wastewater disposal system has sufficient capacity to prevent flooding during the swimming pool filter cleaning cycle and during draining of the swimming pool.

(2) A swimming pool owner shall ensure that wastewater from a swimming pool is discharged through permanent piping to a public sewerage system if it is available.

(3) A swimming pool owner shall ensure that the disposal of wastewater from a swimming pool does not create a threat to public health or safety, a nuisance, or unlawful pollution of the waters of the state. A swimming pool owner maybe required to obtain a permit for the disposal of wastewater under 1994 PA 451, MCL 324.101 et seq.

(4) A swimming pool owner shall ensure that a swimming pool and its recirculation system is protected against backflow from a wastewater disposal system. A swimming pool owner shall ensure that a pipe from the swimming pool or its recirculation system to a sewer discharges through an air gap of not less than 2 pipe diameters, unless the department approves the elimination of the air gap.

(5) A swimming pool owner shall ensure that the wastewater disposal system enables emptying of the swimming pool.

(6) A swimming pool owner shall ensure that the sump for receiving pool wastewater is properly trapped.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2128 Enclosures.

Rule 28. (1) A swimming pool owner shall completely enclose a swimming pool facility by a wall, fence, or other protective enclosure. A swimming pool owner shall ensure that the entire enclosure, including doors and gates, is not less than 4 feet high as measured on the outside, does not provide ready footing for climbing, and is designed to prevent passage through or under the enclosure. A swimming pool owner shall ensure that a sliding-type door is not installed as part of the protective enclosure.

(2) A swimming pool owner shall ensure that the enclosure specified in subrule (1) of this rule has at least 1 entrance. A swimming pool owner shall ensure that each entrance has a door or gate equipped with a self-closer, a latch, and a lock. A swimming pool owner shall

ensure that a sliding-type door is not installed as an entrance. A swimming pool owner shall ensure that an entrance for bathers leads to the shallowest area of the swimming pool.

(3) A swimming pool owner may enclose 2 or more swimming pools within a single enclosure, except that an owner shall enclose a wading pool separately.

(4) A swimming pool owner shall provide a barrier between a permanent spectator area and an area used by bathers.

(5) A swimming pool owner shall ensure that a balcony within 10 feet of or overhanging any portion of the swimming pool water surface is completely enclosed or is designed to prevent diving into the swimming pool.

(6) A swimming pool owner shall ensure that an active recreation area which is adjacent to a swimming pool and which is provided for the use of persons within the swimming pool enclosure is separated by a barrier.

History: 1979 AC; 1983 AAC; 2001 AAC.

R 325.2129 Walkways and decks; "walkway" and "deck" defined.

Rule 29. (1) "Walkway" means the area around and immediately adjacent to the edge of a swimming pool. A swimming pool owner shall provide a continuous, unobstructed walkway as follows:

(a) It shall be not less than 4 feet wide and extend out to any deck drainage if located beyond 4 feet from the edge of the pool.

(b) It shall extend completely around a swimming pool other than a spa pool, water slide pool, or river ride pool.

(c) It shall be not more than 9 inches above the water surface, except at a water slide pool or a wave pool.

(d) It shall be not less than 4 feet wide by not less than 10 feet long at a spa pool and be located at a means of egress from the spa pool.

(e) It shall be not less than 4 feet wide at the side and behind a piece of diving or permanent deck equipment.

(f) It shall be provided on at least 1 side of a river ride pool.

(g) It shall be continuous for a water slide pool, except for the flume entry into the pool.

(h) It shall be not less than 10 feet wide at the main means of egress from a water slide pool.

(2) A swimming pool owner shall ensure that a walkway between 2 swimming pools is not less than 6 feet wide. A swimming pool owner shall ensure that a common wall between a swimming pool and a spa pool is not more than 18 inches thick, not more than 12 feet long in any 1 direction, not more than 24 feet long in total, and designed to prevent a person from walking on the wall.

(3) "Deck" means the remaining area from the edge of the swimming pool walkway to the swimming pool enclosure.

(4) A swimming pool owner shall effectively seal a junction between a walkway or paved deck and a wall to allow for easy cleaning.

(5) A swimming pool owner shall effectively seal a joint between the swimming pool coping and the walkway with a flexible waterproof sealant.

(6) A swimming pool owner shall equip an opening in the walkway with a locking-type cover that is flush with the deck or walkway surface.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2129a Walkway and deck materials; drainage.

Rule 29a. (1) A swimming pool owner shall pave the entire walkway around a swimming pool.

(2) A swimming pool owner shall ensure that the walkway surface materials are durable, slip-resistant, easily cleanable, and nonabsorbent. Acceptable materials include any of the following:

- (a) Concrete.
- (b) Ceramic tile.
- (c) Quarry tile.
- (d) Other paving materials acceptable to the department.

(3) A swimming pool owner shall ensure that the remaining deck area is constructed and maintained to prevent surface drainage, dirt, and other harmful material from being carried into the pool. Acceptable deck materials include any of the following:

- (a) Materials specified in subrule (2) of this rule.
- (b) Wood.
- (c) Grass.
- (d) Shrubbery and other landscaping.
- (e) Other materials acceptable to the department.

(4) A swimming pool owner shall ensure that the walkway and deck are effectively drained to prevent the accumulation of standing water.

(5) A swimming pool owner shall ensure that a walkway slopes away from the swimming pool for not less than 4 feet.

(6) A swimming pool owner shall ensure that a coping or other means is provided to prevent water flow from a walkway into the swimming pool.

(7) A swimming pool owner shall ensure that a deck drain discharges to waste only.

(8) A swimming pool owner shall ensure that roof drainage is not routed onto a swimming pool walkway or deck.

History: 2001 AACS.

R 325.2131 Drinking fountains.

Rule 31. (1) A swimming pool owner shall provide a drinking fountain at a swimming pool.

(2) A swimming pool owner shall ensure that a drinking fountain is an angle jet-type fountain and is located where it is readily accessible to the bathers and is not a safety hazard.

(3) A swimming pool owner shall ensure that wastewater from a drinking fountain is routed to waste in accordance with R 408.30701 et seq.

(4) A swimming pool owner shall ensure that a drinking fountain is not located in a toilet area or shower area.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2132 Water depths; depth markings; lifelines.

Rule 32. (1) A swimming pool owner shall ensure that the following maximum water depths are complied with:

(a) Not more than 5.25 feet in a swimming pool which is smaller than 800 square feet in water surface area and which has a shallow area for walking or standing.

(b) Not more than 1.5 feet in a wading pool.

(c) Not more than 4 feet in a spa pool.

(2) A swimming pool owner shall plainly mark the depth of water in a swimming pool on the walkway next to the swimming pool.

(3) A swimming pool owner shall provide depth markers as necessary to indicate the depth of water as follows:

(a) At each side and at each end of the pool.

(b) At the maximum and the minimum depths.

(c) At a change in the floor slope between shallow and deeper areas.

(d) At other critical points.

(e) At intermediate points not more than 25 feet apart measured peripherally, except at a river ride pool.

(f) At each means of egress at a river ride pool.

(4) A swimming pool owner shall ensure that a depth marker is in compliance with all of the following requirements:

(a) Has legible numerals.

(b) Is not less than 4 inches high.

(c) Is a color that contrasts with the background.

(d) Indicates the units of measure.

(e) Indicates the water depth from the minimum operating water level to the bottom of the pool at that point.

(5) A swimming pool owner shall place the words "no diving" between the depth markers on the walkway where the water depth is less than 5 feet at a swimming pool. A swimming pool owner shall ensure that the words meet the requirements of subrule (4) of this rule.

(6) A swimming pool owner may place "no diving" symbols that are not less than 4 inches high on the walkway in place of the words "no diving" required by subrule (5) of this rule.

(7) A swimming pool owner is not required to place depth markers at the zero depth end of a pool.

(8) A swimming pool owner is not required to place "no diving" markers at a spa pool, wading pool, scuba diving pool, or at the zero depth end of a pool.

(9) A swimming pool owner shall place a sign in a scuba diving pool enclosure which states that the pool is for scuba diving only.

(10) A swimming pool owner shall provide a lifeline at a swimming pool, other than a water slide pool or a wave pool, at a change in floor slope where the water depth is less than 5 feet or at the 5-foot depth if the slope does not change.

(11) A swimming pool owner shall ensure that the lifeline has floats and anchors in both sidewalls near the water level.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2133 Diving areas and facilities; "plummet" defined.

Rule 33. (1) A swimming pool owner shall not install a diving facility unless the department approves in writing before the installation.

(2) A swimming pool owner shall ensure that a diving area conforms to table 1 and figure 1 of this rule.

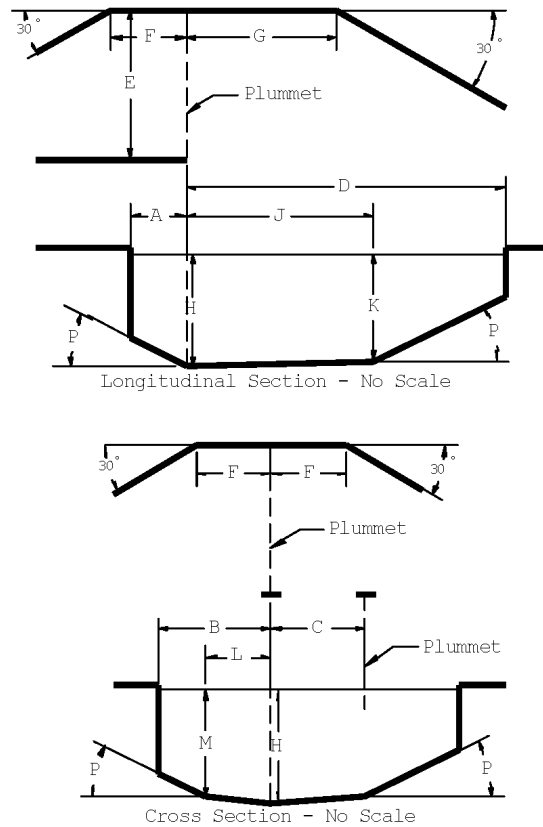
(3) Table 1 and figure 1 read as follows:

Table 1 Diving Areas

Letters below refer to Figure1		Board height in meters	0.5 Meter	1.0 Meter	3.0 Meters
		Board height (feet)	1'8	3'4"	9'11"
		Board length (feet)	10'0"	16'0"	16'0"
		Board width (feet)	1'8	1'8"	1'8"
		Minimum dimensions in feet			
A	Distance from plummet back to pool wall		2'0"	5'0"	6'0"
B	Distance from plummet to pool wall at side		8'3"	8'3"	11'6"
C	Distance from plummet to adjacent plummet		7'1"	7'1"	8'3"
D	Distance from plummet to pool wall ahead		26'0"	29'7"	33'8"
E	Height from board to ceiling at plummet and distances F and G		16'0"	16'0"	16'0"
F	Clear overhead distance behind and each side of plummet		8'0"	8'0"	8'0"
G	Clear overhead distance ahead of plummet		16'0"	16'0"	16'0"
H	Depth of water at plummet		8'6"	11'0"	12'0"
J	Distance ahead of plummet to depth K		12'0"	16'5"	19'9"
K	Depth at distance J ahead of plummet		8'3"	10'9"	11'9"
L	Distance at each side of plummet to depth M		8'0"	5'0"	6'7"
M	Depth at distance L on each side of plummet		8'3"	10'9"	11'9"
N	Maximum slope to reduce height E		30 degrees	30 degrees	30 degrees

	Maximum floor slope to reduce depth ahead of K, to the sides of M, or back to pool wall behind H	1:3	1:2	1:2
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Figure 1
Diving Areas



(4) "Plummet" means a vertical line which passes through the end of, and which is at the center line of, a diving board or diving platform.

(5) A swimming pool owner shall install diving equipment in compliance with this rule and the equipment manufacturer's recommendations.

(6) A swimming pool owner shall ensure that a diving board, platform, and appurtenances meet all of the following requirements:

(a) Be constructed to ensure stability and safely carry the maximum anticipated loads.

(b) Be constructed of corrosion-resistant, easily cleanable, nonabsorbent, and slip-resistant materials.

(c) Have handholds on both sides of the ladder or stairway to a diving board or diving platform.

(d) For a diving stand or platform 1.0 meter or higher above the water, have guard railings on both sides of the diving board which extend to a position above the edge of the water and which are equipped with intermediate rails. A diving stand or platform used exclusively for competitive purposes is exempt from this subdivision.

(7) A swimming pool owner shall consider the safety of swimmers and divers in the location and orientation of diving facilities. A swimming pool owner shall locate all diving boards and diving platforms at a pool on the same wall.

(8) For pools that have diving facilities which were constructed before the effective date of this rule and which do not comply with this rule, the department may approve the diving facilities for competitive purposes. For competitive purposes, a swimming pool owner shall ensure that the pool diving depths and facilities meet the requirements in effect on March 24, 1971 and shall operate the facilities in accordance with R 325.2198.

(9) If a pool is not in compliance with the requirements of this rule, and if the department has issued a correction order to remedy an unsafe condition under R 325.2114, then a swimming pool owner shall remove a diving facility or bring it into compliance with this rule.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2134 Ladders, stairways, and ramps.

Rule 34. (1) A swimming pool owner shall equip a swimming pool with ladders, stairways, or similar means of egress in compliance with all of the following provisions:

(a) Have at least 1 means of egress at each end of a pool, other than a wading pool, water slide pool, or a spa pool, that is less than 30 feet wide.

(b) Have not less than 2 means of egress located at opposite sides and at each end of a pool, other than a wading pool or a water slide pool, that is 30 or more feet wide.

(c) Have at least 1 means of egress for a water slide pool or a spa pool.

(d) Have a means of egress consisting of a ladder, stairway, or ramp for a pool other than a water slide pool or a spa pool.

(e) Have a means of egress consisting of a stairway or ramp for a water slide pool or a spa pool.

(f) Have at least 1 ladder for each diving board in a diving area.

(2) A swimming pool owner shall ensure that the distance from any point in a swimming pool to a means of egress is not more than 50 feet, except that a wave pool may have more than 50 feet to a means of egress where the water depth is less than 3.5 feet.

(3) A swimming pool owner shall ensure that a swimming pool ladder is corrosion-resistant and sturdy and has slip-resistant treads, side rails extending over the deck, and not more than 6 inches of clearance to the swimming pool wall. A swimming pool owner shall

ensure that a recessed ladder has stepholes which drain into the swimming pool and which are easily cleanable and has a grab rail at each side of the ladder.

(4) A swimming pool owner shall ensure that a stairway leading into a swimming pool is in compliance with all of the following provisions:

(a) Has slip-resistant treads.

(b) Has uniform size treads that are not less than 12 inches deep and uniform size risers that are not more than 10.5 inches high for a swimming pool other than a spa pool.

(c) Has uniform size treads that are not less than 11 inches deep and uniform size risers that are not more than 12 inches high for a spa pool.

(d) Has the front edge of each step marked in a color that contrasts with the background.

(e) Is located where the water depth is either not more than 4 feet or is in a diving area and is located where the stairway will not be a hazard to swimmers.

(f) Has 1 sturdy handrail per 12 feet of the stairway width or fraction of 12 feet or in accordance with other applicable codes and is reachable for the length of the stairway. The stairway may have the top tread wider and the top or bottom riser shorter than the others.

(5) A swimming pool owner shall ensure that a ramp leading into a swimming pool is in compliance with all of the following provisions:

(a) The slope is not steeper than 1 in 12 from the horizontal.

(b) Terminates where the water depth is 3.5 feet or less.

(c) Is located where the ramp will not be a hazard to swimmers.

(d) Is slip-resistant.

(e) Has a sturdy handrail along each side of the ramp which is reachable for the length of the ramp.

(6) A swimming pool owner shall ensure that a stairway or ramp for a water slide pool is wide enough to accommodate the expected usage and, preferably, as wide as the exit end of the pool.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2135 Starting platforms.

Rule 35. (1) After the effective date of this rule, if starting platforms are provided at a swimming pool, then a swimming pool owner shall ensure that the platforms are in compliance with the following water depth and platform height requirements, as applicable:

(a) For water depths less than 79 inches, starting platforms shall not be installed.

(b) For water depths 79 inches and deeper across all swimming lanes, the front edge of the starting platforms shall be not higher than 30 inches above the water surface.

(2) A swimming pool owner shall ensure that a starting platform meets all of the following requirements:

(a) Is installed where the minimum water depth is maintained for a distance from 2 feet to not less than 19 feet out from the edge of the pool across all swimming lanes.

(b) Is installed with the front edge extending to the edge of the water.

(c) Is easily removable without tools when located at a water depth of less than 8.5 feet.

(3) A swimming pool owner shall ensure that a starting platform that was installed before the effective date of this rule and has water depths less than 60 inches is brought into compliance with subrules (1) and (2) of this rule or is permanently removed.

History: 2001 AACS.

R 325.2136 Water circulation.

Rule 36. (1) A swimming pool owner shall equip a swimming pool for continuous, uniform circulation of treated water within the swimming pool tank and for continuous removal, treatment, and reuse of the water.

(2) A swimming pool owner shall ensure that the water recirculation and treatment system is adequate for recirculating and treating the entire volume of water as follows:

(a) In 6 hours or less for a swimming pool.

(b) In 1 hour or less for a wading pool.

(c) In 1 hour or less for a spa pool.

(d) In 2 hours or less for a river ride pool.

(e) In 1 hour or less for a water slide pool.

(f) In 4 hours or less for a wave pool.

(g) In less time than specified in subdivisions (a) to (f) of this subrule if necessary to meet the hydraulic design requirements for the surface skimmer system required by R 325.2144.

(h) In less time than specified in subdivisions (a) to (f) of this subrule if necessary to remedy water quality, clarity, or other operational problems.

(3) The swimming pool owner shall ensure that the entire volume of a special purpose pool is recirculated and treated at a rate acceptable to the department.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2137 Swimming pool water piping.

Rule 37. (1) A swimming pool owner shall ensure that swimming pool water piping is all of the following:

(a) Nontoxic material.

(b) A potable water grade.

(c) Durable.

(d) Resistant to corrosion.

(e) Rated to withstand operating pressures of not less than 160 pounds per square inch.

(2) A swimming pool owner shall ensure that plastic pipe is equivalent to either of the following types of piping, as determined by the department:

(a) Piping certified for potable water by NSF International or other nationally recognized certifying agency.

(b) Schedule 40 polyvinyl chloride or heavier piping.

(3) A swimming pool owner shall ensure that plastic piping is not used for the piping from 5 feet upstream to 5 feet downstream from a water heater, unless the heater manufacturer's written recommendations approve the use of shorter piping or a specific pipe product.

(4) A swimming pool owner shall ensure that the piping is designed to carry the required quantities of water at velocities of not more than 5 feet per second in suction piping and 10 feet per second in pressure piping, unless greater velocities are warranted.

(5) A swimming pool owner shall ensure that the piping meets all of the following requirements:

- (a) Is protected against erosion, corrosion, mechanical damage, and other deterioration.
- (b) Is provided with fittings necessary for disassembly of any part.
- (c) Is arranged to allow ready, safe, and proper operation and maintenance of the swimming pool facilities.
- (6) A swimming pool owner shall mark exposed pool piping with labels and arrows showing the normal direction of water flow.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2138 Flow controls; rate-of-flow indicators.

Rule 38. (1) A swimming pool owner shall provide a valve for regulating the rate of flow through a swimming pool in the recirculation pump discharge piping.

(2) A swimming pool owner shall provide a rate-of-flow indicator on the pump discharge piping before or after the filter.

(3) A swimming pool owner shall ensure that a rate-of-flow indicator meets all of the following requirements:

- (a) Is the proper size and design for the pipe and system on which it is installed.
- (b) Has a durable scale that is graduated in gallons per minute.
- (c) Is sized to operate as close as practical to the midrange of the indicator at the design recirculation flow rate.
- (d) Is installed where it is readily accessible for reading and maintenance.
- (e) Is installed with straight pipe upstream and downstream from the indicator to any fitting or restriction in accordance with the manufacturer's recommendations.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2141 Inlets.

Rule 41. (1) A swimming pool owner shall ensure that a swimming pool water inlet system has inlets adequate in design, number, and location to ensure uniform distribution of treated water throughout the swimming pool.

(2) A swimming pool owner shall ensure that an inlet meets all of the following requirements:

- (a) Is equipped for flow rate adjustment.
- (b) Does not extend from the swimming pool wall or floor so as to create a hazard.
- (c) Is not less than 12 inches below the water level or is not less than 6 inches below the water level and designed to direct the flow downward.

(3) A swimming pool owner shall ensure that a pool has the following number of inlets:

- (a) Not less than 2 inlets.
- (b) Not less than 1 inlet per 20 lineal feet of swimming pool periphery, except at a river ride pool.

(c) More inlets than required in subdivision (a) or (b) of this subrule if necessary for the uniform circulation of water.

(4) A swimming pool owner shall ensure that the location of inlets for a swimming pool other than a river ride pool or a water slide pool is as follows:

(a) For a wall inlet system, inlets shall be spaced not more than 20 feet apart as measured along the swimming pool wall.

(b) For a floor inlet system, inlets shall be uniformly spaced not more than 20 feet apart and there shall be an inlet not more than 15 feet from each wall.

(c) Where water circulation might be impaired, there shall be at least 1 inlet located in each recessed stairwell, underwater seat, or other space.

(5) A river ride pool or water slide pool owner shall provide a pool with 1 or more inlets adequate in number and location to provide and maintain flow rates and water quality in accordance with R 325.2194.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2142 Main and other outlets.

Rule 42. (1) A swimming pool owner shall ensure that a swimming pool has 2 or more main outlets for the recirculation system pump for continuous removal of water for treatment and for emptying the pool.

(2) A swimming pool owner shall ensure that the main outlets for the recirculation system pump meet all of the following requirements:

(a) Are designed and located to ensure the complete draining of the pool.

(b) Are designed and located to prevent entrapment and to prevent the restriction of flow by the simultaneous covering of all outlets on the system by 1 person.

(c) Do not extend from the swimming pool floor or wall so as to create a hazard.

(d) Are covered with a grate which is not hazardous to bathers, which is secured in place, and which is removable only with tools.

(e) Have an open area for each grate large enough to assure water entrance velocities of not more than 2 feet per second, with as close as practical to equal flow through each outlet grate.

(f) Have the total open area for all main outlet grates large enough to assure water entrance velocities of not more than 1 foot per second.

(g) Are interconnected with unrestricted piping that does not contain valves.

(3) If another pump or pumps are provided, then a swimming pool owner shall ensure that the same outlet system supplying water to the pumps complies with the requirements of subrules (2)(b), (c), (d), (e), (f), and (g) of this rule.

(4) A swimming pool owner shall ensure that all outlet openings meet both of the following requirements:

(a) Are not less than 3 feet nor more than 20 feet from another outlet as measured center to center.

(b) Are provided not more than 15 feet from a sidewall for a main outlet.

(5) A swimming pool owner shall ensure that all outlet discharge piping is valved in the equipment room as close as practical to the pump suction.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2143 Overflow systems.

Rule 43. (1) A swimming pool owner shall ensure that a swimming pool is equipped with an overflow system to remove floating material from the water surface. A swimming pool owner shall ensure that a swimming pool that is not more than 2,400 square feet in water surface area has either a perimeter overflow system or surface skimmers or that a swimming pool which is more than 2,400 square feet in water surface area has a perimeter overflow system.

(2) A swimming pool owner shall ensure that a perimeter overflow system meets all of the following requirements:

(a) Extends completely around the swimming pool, except for a spa pool, river ride pool, water slide pool, a special purpose pool, or a location where the design and construction of the perimeter overflow system must change due to construction limitations.

(b) Has the overflow lip as level as practical, plus or minus 1/8 inch.

(c) Has a minimum opening of 6 inches or has a covering adequate to prevent entrapment of any part of the bather's body.

(d) Permits ready inspection, cleaning, and repair.

(e) Is designed for removal of the water at a rate of not less than 100% of the design flow rate.

(f) Provides for discharging the water for treatment and reuse.

(g) Provides a handhold for bathers.

(h) Effectively removes floating materials from the water surface.

(3) A swimming pool owner shall ensure that a perimeter overflow system extends as follows:

(a) Around a spa pool or a water slide pool in a manner acceptable to the department.

(b) Around a river ride pool at major changes of direction acceptable to the department.

(c) Around a special purpose pool in locations acceptable to the department where the shape of the pool may cause practical difficulties in the construction of a continuous perimeter overflow system.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2143a Overflow system open tanks and surge capacity.

Rule 43a. (1) A swimming pool owner shall equip a swimming pool equipped with a perimeter overflow system with an open tank for containing the free discharge of water from the perimeter overflow system for treatment and reuse.

(2) A swimming pool owner shall ensure that an open tank meets all of the following requirements:

(a) Has a capacity from the design operating level of the surge tank to the tank overflow elevation of not less than 2 minutes of flow from the filtration pump.

(b) Has an automatic means to supply potable water to the pool or to the open tank that is activated based on the water level in the pool or in the open tank.

(c) Has tank overflow piping that meets both of the following requirements:

(i) Is sufficiently lower than the perimeter overflow system lip to assure continuous flow at the design flow rate.

(ii) Is designed to prevent flooding of the equipment room or other areas in case of mechanical failure.

(d) Has a means to automatically regulate the main outlet system flow rate based on the variation of water level in the open tank or perimeter overflow system.

(e) Has a means to completely drain the open tank when necessary.

(3) A swimming pool owner shall ensure that a pool which has a perimeter overflow system has surge capacity of not less than 1 gallon per square foot of pool water surface area. A swimming pool owner shall ensure that total surge capacity is the sum of the open tank capacity and either of the following if capacity is available:

(a) Capacity in the perimeter overflow system.

(b) Capacity in the pool of not more than 50% of the required surge capacity if the perimeter overflow system is equipped with surge weirs.

History: 2001 AACS.

R 325.2144 Surface skimmers and surge weirs.

Rule 44. (1) A swimming pool owner shall ensure that a swimming pool, other than a spa pool, which is equipped with surface skimmers or a perimeter overflow system that has surge weirs has at least 1 surface skimmer or surge weir for every 500 square feet of water surface area or fraction of 500 square feet. A swimming pool owner shall provide additional surface skimmers or surge weirs if necessary for effective skimming or to meet the surface skimmer hydraulic design requirements.

(2) A swimming pool owner shall ensure that a spa pool has 1 surface skimmer for every 250 square feet of surface area or fraction of 250 square feet.

(3) A swimming pool owner shall not provide a spa pool, a river ride pool, or a wave pool equipped with a perimeter overflow system with surge weirs.

(4) A swimming pool owner shall ensure that a surface skimmer or surge weir is in compliance with both of the following provisions:

(a) Is designed to effectively remove floating material from the water surface.

(b) Is located to ensure proper skimming of the entire water surface with minimum interference and minimum short-circuiting.

(5) A swimming pool owner shall ensure that a surface skimmer meets all of the following requirements:

(a) Has an automatically adjustable weir.

(b) Has an easily removable and cleanable strainer basket.

(c) Has a flow rate control device.

(d) If an equalizer pipe is provided, the pipe has a device that will remain tightly closed under normal operating conditions.

(e) Is built into the swimming pool wall and does not create a safety hazard.

(6) A swimming pool owner shall ensure that a swimming pool recirculation system is designed for a flow of 37.5 gallons per minute per surface skimmer with 80% of the flow (30 gallons per minute) to be directed through the skimmer and 20% of the flow (7.5 gallons per minute) to be directed through the main drain.

(7) A swimming pool owner shall ensure that a surface skimmer piping system is equipped with a means to adjust the flow through each skimmer either in each skimmer or in the equipment room as close as practical to the pump suction to provide for uniform surface skimming and to allow balancing of flow between the skimmer system and the main outlet system.

(8) A swimming pool owner shall ensure that a surge weir for a perimeter overflow system meets all of the following requirements:

- (a) Is designed to effectively skim the water surface.
- (b) Is designed for a minimum flow rate of 50 gallons per minute and for 20 gallons per minute per lineal foot of weir.
- (c) Is designed to effectively close during periods of use when rim flow is necessary.
- (d) Is built into the perimeter overflow system and does not create a safety hazard.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2145 Recirculation pumps.

Rule 45. (1) A swimming pool owner shall ensure that a recirculation system is equipped with a single pump that has a sufficient capacity for recirculating the swimming pool volume of water within the time period required in R 325.2136 and for providing flow adequate for cleaning the filters.

(2) A swimming pool owner shall ensure that the pump and motor meet all of the following requirements:

- (a) Are capable of continuous operation.
- (b) Are self-priming if the pump or suction piping is above the swimming pool water level.
- (c) Are manufactured of materials suitable for continuous exposure to water and normal concentrations of pool treatment chemicals.
- (d) Are securely mounted to prevent strain on the piping.
- (e) Are equipped with an emergency shutoff device.

(3) A swimming pool owner shall install a gauge to measure the pump discharge pressure.

(4) If the water is pumped from the swimming pool to the filters, a swimming pool owner shall provide a strainer on the suction side of the pump and shall ensure that the strainer meets all of the following requirements:

- (a) Is corrosion-resistant, readily removable, and easily cleanable.
- (b) Is equipped with valves to permit removal of the strainer basket without water flowing through the chamber.
- (c) Is provided with a spare strainer basket .

(5) A swimming pool owner shall not install a timer to control the operation of the recirculation pump.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2146 Water agitation and other pump systems.

Rule 46. (1) If agitation of the water in a spa pool is provided or if other pump systems in a swimming pool are provided, then a pool owner shall ensure that the agitation or other water movement is accomplished with a pump separate from the water treatment and recirculation system pump.

(2) A pool owner shall ensure that an electrical switch, timer, or emergency shutoff device to operate the agitation system pump is not reachable from the pool.

(3) A swimming pool owner shall equip a wave pool with not less than 2 emergency wave shutoff devices and shall locate 1 device on each side of the pool at a fixed lifeguard station.

(4) If an air induction system is provided, a pool owner shall ensure that the system meets both of the following requirements:

(a) Is designed to prevent water backup that could cause electrical shock hazards.

(b) Is designed so the air intake source does not permit the introduction of toxic fumes or other contaminants.

History: 1983 AACS; 2001 AACS.

R 325.2151 Filters.

Rule 51. (1) A swimming pool owner shall ensure that a swimming pool water treatment system has 1 or more filters for clarifying the water. A swimming pool owner shall ensure that a filter meets all of the following requirements:

(a) Is capable of producing acceptable water clarity.

(b) Enables easy removal of the material filtered out.

(c) Is convenient to operate and maintain.

(d) Is installed with adequate clearance and facilities for ready and safe inspection, operation, maintenance, disassembly, and repair.

(2) A swimming pool owner shall ensure that a filter system shall have sufficient filtration area to meet the required flow rate without exceeding the established maximum filtration rate demonstrated to produce acceptable water clarity.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2152 Sand-type filters.

Rule 52. (1) A swimming pool owner shall ensure that a sand-type filter system is designed to operate at a maximum filtration rate of 20 gallons per minute per square foot of filter area and a backwash rate of 15 gallons per minute per square foot of filter area. The department may approve other flow rates based on test data or other performance data that demonstrate compliance with R 325.2151.

(2) A swimming pool owner shall ensure that the backwash water is discharged to waste and that a means for viewing backwash water clarity is provided.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2153 Diatomaceous earth-type filters.

Rule 53. (1) A swimming pool owner shall ensure that a diatomaceous earth-type filter system meets all of the following requirements, as applicable:

(a) Is designed to operate at a maximum rate of 1.5 gallons per minute per square foot of filter area.

(b) Is designed to operate at a maximum rate of 2 gallons per minute per square foot of filter area if body feed equipment is provided that is capable of applying 0.1 pound of diatomaceous earth per square foot of filter area per 24 hours.

(c) Is designed to discharge the precoat filter effluent to waste or to an open tank for recirculation through the filter and not to the swimming pool or through a closed recirculation system.

(2) A swimming pool owner shall provide a means for viewing the precoat effluent clarity.

(3) A swimming pool owner shall ensure that the filter allows the effective removal of the filter-aid and the filtered-out material from the septums and the filters to waste without disassembly of the filters.

(4) A swimming pool owner shall ensure that a pressure diatomaceous earth-type filter system shall have a precoat pot.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2154 Filter accessories.

Rule 54. (1) A swimming pool owner shall ensure that a filter system is equipped with valves and piping necessary to isolate the filters for maintenance and repair and to completely drain all parts of the filter system.

(2) A swimming pool owner shall ensure that a pressure-type filter system is equipped with a gauge to indicate the filter influent pressure and, if the filter system is lower than the swimming pool water surface, is equipped with a gauge to measure the filter effluent pressure.

(3) A swimming pool owner shall ensure that a pressure gauge meets all of the following requirements:

- (a) Is graduated in pounds per square inch (psi).
- (b) Has an appropriate range of readings.
- (c) Is a minimum of 2 inches in diameter.
- (d) Is located so it can be read easily.

(4) A swimming pool owner shall ensure that a pressure filter tank has a manual air release connected to the top of the tank, unless air can be expelled easily by another means.

(5) A swimming pool owner shall ensure that a vacuum-type filter system is equipped with a vacuum gauge in the piping between the filter and the recirculation pump.

(6) A swimming pool owner shall ensure that the vacuum gauge meets all of the following requirements:

- (a) Is graduated in inches of mercury in 1-inch increments.
- (b) Has an appropriate range of readings.
- (c) Is a minimum of 2 inches in diameter.
- (d) Is located so it can be read easily.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2155 Cartridge-type filters.

Rule 55. (1) A swimming pool owner shall ensure that a cartridge-type filter system meets all of the following requirements:

(a) Is designed for a maximum flow rate of 3/8 of a gallon per minute per square foot of filter area.

- (b) Is equipped with a means to drain the filter tank to prevent equipment room flooding.
- (c) Is provided with a spare set of cartridges that is not less than 100% of the required filtration area.
- (d) Is provided with a means, on the premises and acceptable to the department, for cleaning the cartridges according to the manufacturer's recommendations.

History: 1983 AACS; 2001 AACS.

R 325.2156 Disinfectants and other chemicals.

Rule 56. (1) A chemical manufacturer shall provide evidence to the department that a chemical or other additive for disinfecting or otherwise treating swimming pool water meets all of the following requirements:

- (a) Does not create objectionable physiological effects to bathers.
- (b) Does not impart toxic or other deleterious properties to bathers or to the water.
- (c) Is compatible in the water with other chemicals and processes normally used in swimming pool water treatment.
- (d) Is safely and simply handled and closely controlled in its usage.
- (e) Is measured by readily applied poolside tests to determine its concentration, residual, or effectiveness.

(2) The department may authorize the use of a disinfectant if the owner applies the disinfectant in a concentration that is appropriate, practical, and safe under normal pool conditions and if the disinfectant has been demonstrated, to the department, to be as effective in disinfection as both of the following:

- (a) A free available chlorine residual of 1.0 milligram per liter at a pH of 7.2.
 - (b) A solution that has an oxidation-reduction potential equivalent to 650 millivolts or more as measured with a silver-silver chloride electrode.
- (3) A swimming pool owner shall apply the disinfectant at a suitable point in the recirculation system for effective disinfection of the recirculating water.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2157 Chemical feeders.

Rule 57. (1) A swimming pool owner shall ensure that a swimming pool has a chemical feeder and auxiliary equipment for the safe, continuous, controlled application of a chemical for disinfection of the water and the production and maintenance of a suitable residual of the disinfectant.

(2) A swimming pool owner shall ensure that the chemical feeder meet all of the following requirements:

- (a) Has sufficient capacity for achieving the required disinfectant residual.
- (b) Is easily adjustable in output rate.
- (c) Is capable of continuous operation.
- (d) Is resistant to corrosion or clogging from the chemicals intended to be used in it.
- (e) Is easy and safe to disassemble and reassemble for cleaning and maintenance.

(3) If a feeder for pH control is provided, then a swimming pool owner shall install the feeder in accordance with the manufacturer's recommendations in a manner acceptable to the department.

(4) A swimming pool owner shall connect an electrically operated chemical feeder to an electrical outlet energized only when the filtration pump is operating.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2158 Liquid chlorine.

Rule 58. A swimming pool owner shall not use liquid chlorine (liquefied elemental chlorine gas) at a swimming pool.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2159 Chemical test equipment.

Rule 59. (1) A swimming pool owner shall provide, at a swimming pool, equipment for testing the disinfectant residual, the pH, and any other chemical characteristics of the water determined by the department to be important in the control of water quality which may include total alkalinity, calcium hardness, total dissolved solids, and cyanuric acid levels.

(2) A swimming pool owner shall ensure that a chemical test kit meets all of the following requirements:

- (a) Is durable under normal pool use and storage conditions.
- (b) Has an appropriate range of accuracy.
- (c) Has fresh reagents.
- (d) Is safe and simple to use.

(3) A swimming pool owner shall ensure that the pH test kit standards range from 6.8 to 8.0.

(4) A swimming pool owner shall ensure that the disinfectant test kit standards range from 0.0 to 5.0 mg/l or higher and are readable to the nearest 0.5 mg/l.

(5) A swimming pool owner shall use the n,n-diethyl-p-phenylenediamine (dpd) indicator or other generally accepted standard method for determining the disinfectant residual.

(6) When a cyanurate is used for disinfectant stabilization, a swimming pool owner shall provide test equipment for the cyanuric acid level.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2161 Water heaters and thermometers.

Rule 61. (1) A swimming pool owner shall ensure that a swimming pool water heater piping system includes an external bypass of the heater if the swimming pool is larger than 3,000 gallons in volume or if the water heater is not designed for at least 100% of the required recirculation flow rate.

(2) A swimming pool owner shall not install a heating coil, pipe, or steam hose in a swimming pool.

(3) A swimming pool owner shall provide an automatic shutoff device for the heater that maintains pool water temperatures not to exceed those specified in R 325.2194.

(4) If a swimming pool has a pool water heater, then the owner shall provide a fixed thermometer at a point in the piping before the pool water heater to measure the temperature of the flowing water.

(5) A swimming pool owner shall ensure that a thermometer meets all of the following requirements:

(a) Is graduated to indicate temperature to the nearest 2 degrees Fahrenheit in the operating range.

(b) Is located to be read easily.

(c) Is located where it will not be subject to damage.

(d) Is located and installed in compliance with R 408.4001 et. seq.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2163 Vacuum cleaning systems.

Rule 63. A swimming pool owner shall provide a vacuum cleaning system that is capable of cleaning the swimming pool.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2165 Safety equipment.

Rule 65. (1) A swimming pool owner shall equip a swimming pool with an acceptable long spineboard that has a minimum of 3 ties, runners, and a head immobilizer.

(2) A swimming pool owner shall equip a swimming pool with a first aid kit which is used primarily to treat small cuts, bruises, and burns and which contains all of the following first aid materials or their equivalent:

(a) Four units of adhesive bandages, 1 inch by 3 inches.

(b) Two units of 2-inch bandage compress.

(c) One unit of 3-inch bandage compress.

(d) One unit of 4-inch bandage compress.

(e) Two units of absorbent gauze pad, 3 inches by 3 inches.

(f) One unit of gauze compress, 18 inches by 36 inches.

(g) Two units of large gauze compress, 24 inches by 72 inches.

(h) Two units of 4-inch gauze roller bandages.

(i) Two units of triangular bandages.

(j) One unit of scissors.

(k) One unit of tweezers.

(l) Two units of instant ice packs.

(m) Two units of latex disposable gloves.

(n) One unit of adhesive plaster tape.

(3) A swimming pool owner shall equip a swimming pool with a kit to clean up blood spills which consists of as a minimum, a pair of medical-grade latex gloves and a antimicrobial hand wipe.

(4) A swimming pool owner shall equip a swimming pool, other than a wading pool or a spa pool, with both of the following:

(a) A 1-piece, 12-foot long rescue pole which has blunt ends and which may have a shepherd's crook.

(b) A ¼-inch diameter throwing rope as long as 1 ½ times the maximum width of the swimming pool or 50 feet, whichever is less, with 1 end attached to an 18-inch diameter ring buoy or rescue bag.

(5) A swimming pool owner shall equip a pool at which lifeguard service is provided with all of the following:

(a) A megaphone or public address

(b) One whistle per lifeguard on duty.

(c) One rescue tube per lifeguard on duty where the water depth is more than 3.5 feet.

(d) One resuscitation mask per lifeguard on duty.

(6) When multiple swimming pools are in the same enclosure or in close proximity, the department or local health department may accept 1 set of safety equipment for all of the pools.

(7) A swimming pool owner shall keep all required safety equipment in the pool enclosure or at another location approved by the department or local health department and shall keep the equipment stocked, in good repair, and in ready condition.

(8) A swimming pool owner shall provide a telephone or other suitable means of communication for emergencies. The owner may locate the telephone or other means of communication in any of the following areas:

(a) Within the pool enclosure.

(b) In another location approved, in writing, by the department. If another location is approved, the owner shall post a sign indicating the location of the telephone within the pool enclosure.

(9) A swimming pool owner shall post a sign at the telephone that indicates the phone numbers for emergency response agencies and the name and address of the swimming pool to assist emergency personnel in locating the facility.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2171 Mechanical equipment rooms.

Rule 71. (1) A swimming pool owner shall ensure that a swimming pool mechanical equipment room meets all of the following requirements:

(a) Is a properly lighted and ventilated structure constructed in accordance with the general rules of the construction code commission.

(b) Affords the mechanical equipment protection from the weather.

(c) Is readily accessible and convenient for operation and maintenance.

(d) Prevents unauthorized access.

(e) Is properly drained.

(f) Enables servicing of the equipment.

(g) Does not have a hatch-type opening located in a swimming pool enclosure.

(h) Is easily accessible by a ramp or stairway if it is located at a floor level different from the pool enclosure.

(i) Has a minimum ceiling height of 7 feet.

(j) Has a sufficient usable floor area to permit servicing, removal, and replacement of all equipment, as follows:

(i) Has the greater of 80 square feet or 6.25% of the pool surface area, plus 30 square feet.

(ii) Has additional area equal to not less than 50% of the area calculated in paragraph (i) of this subdivision for an additional pool of equal or smaller surface area built at the same time or later.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2172 Storage areas; offices; other rooms.

Rule 72. (1) Suitable space shall be provided for the storage of chemicals, tools, equipment, supplies, and records where they will be readily available, adequately ventilated, and protected from weather. Physical separation of incompatible chemicals shall be provided.

(2) A storage area, office, mechanical equipment room, or other room adjacent to a swimming pool shall be arranged to minimize traffic by people in shoes across the deck.

History: 1979 AC; 1983 AACS.

R 325.2174 Bathhouse facilities, location, and design.

Rule 74. (1) A swimming pool owner shall ensure that a swimming pool has a bathhouse with dressing, shower, and toilet facilities based on the maximum bather load prescribed by R 325.2193 and the fixture schedule prescribed by R 325.2175, except as follows:

(a) Dressing and shower facilities are not required for a wading pool only.

(b) The department may approve reductions in required poolside dressing, shower, and toilet facilities for a swimming pool located at establishments that have living units which are readily accessible from the swimming pool. If reductions in bathhouse facilities are approved, then the owner shall restrict the use of the swimming pool to residents or registered guests only. For apartments, condominiums, hotels, motels, manufactured housing communities, resorts, town houses, and similar establishments, the department may approve reductions in required facilities as follows:

(i) For a bather load of 100 persons or less, there shall be at least 1 nonenclosed poolside shower, 1 water closet for each sex, and 1 lavatory for each sex.

(ii) For a bather load of more than 100 persons, a 50% reduction in fixtures is permissible.

(iii) Dressing areas may be eliminated.

(c) The department or local health department may approve nonenclosed poolside showers to replace enclosed shower facilities.

(d) The department or local health department may approve a unisex toilet facility in place of facilities for each sex at swimming pools that have an anticipated maximum bather load of up to 25 persons. A swimming pool owner shall ensure that a unisex toilet facility is in compliance with R 408.30725b.

(e) The department may approve other bathhouse fixture schedules for special purpose pools and other unusual situations.

(2) A swimming pool owner shall ensure that a bathhouse is designed to route swimmers directly onto the swimming pool walkway or deck.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2175 Bathhouse plumbing fixtures.

Rule 75. (1) A swimming pool owner shall ensure that a bathhouse has showers and toilet facilities that are in compliance with the specifications of table 2 of this rule.

(2) Table 2 reads as follows:

Table 2

Minimum Bathhouse Fixtures

Maximum Bather Capacity* per R 325.2193	Number of fixtures for each sex		Number of toilet fixtures toilet fixtures		
			For males		For females
	Showers**	Lavatories	Water closets	Urinals ***	Water closets
1-50	1	1	2	0	2
51-100	2	2	2	1	3
101-200	3	2	3	1	4
201-300	4	3	4	1	5
301-500	5	3	5	1	6
501-700	6	4	6	1	7
701-1,000	7	4	7	1	8

* In addition, a swimming pool owner shall provide 1 shower, 1 water closet, and 1 lavatory for each sex for each additional 300 persons, or fraction of 300 persons, starting at 1,001.

**At a swimming pool used by school classes, a swimming pool owner shall provide 1 shower for every 3 people in the largest class for each sex. A owner may substitute nonenclosed poolside showers for showers in accordance with R 325.2174.

***An owner may substitute urinals for not more than ½ of the required number of water closets.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2176 Bathhouse construction.

Rule 76. (1) A swimming pool owner shall ensure that a bathhouse is designed and constructed to promote safe and sanitary conditions.

(2) A swimming pool owner shall ensure that a bathhouse meets all of the following design and construction requirements:

- (a) The floor is durable, slip-resistant, easily cleanable, and nonabsorbent and does not have unsealed seams, open joints, or cracks.
- (b) A wall or partition is durable, easily cleanable, and nonabsorbent and does not have unsealed seams or cracks.
- (c) A junction between the floor and a wall or partition is coved to provide for cleanability.
- (d) The floor is sloped to drains.
- (e) The ceiling is constructed and finished with moisture-resistant materials.
- (3) A swimming pool owner shall ensure that a locker is of rigid construction, properly vented, and set on legs or on a properly designed base to allow cleaning.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2178 Nonenclosed poolside showers.

Rule 78. (1) A swimming pool owner shall provide a nonenclosed poolside shower in a swimming pool enclosure at locations necessary to prevent bathers from carrying dirt or debris into the pool.

(2) A swimming pool owner shall ensure that a nonenclosed shower is in compliance with all of the following requirements:

- (a) Is supplied from the potable water system.
- (b) Has a spray head which is not higher than 80 inches above the walkway and which is arranged to spray the bathers from head to feet during use.
- (c) Is equipped with a conveniently located valve
- (d) Has drainage to discharge the water immediately without ponding or creating a nuisance.
- (e) Is located where it will be effective without creating an accident hazard.
- (f) Is supplied with tempered water in accordance with R 325.2125.
- (3) A swimming pool owner shall not install a footbath in which water can accumulate.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2179 Hose and hose bibs.

Rule 79. A swimming pool owner shall provide hose connections and hose adequate for cleaning the pool deck, walkway, and bathhouse.

History: 2001 AACS.

R 325.2181 Lighting.

Rule 81. (1) A swimming pool owner shall provide a lighting system, natural or artificial, for a swimming pool. The system shall adequately illuminate the entire swimming pool and enclosure during all periods of use.

(2) A swimming pool owner shall illuminate a bathhouse, mechanical equipment room, or storage area.

(3) A swimming pool owner shall protect a lighting fixture against breakage.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2182 Heating, ventilation, and dehumidification.

Rule 82. (1) A swimming pool owner shall ensure that a bathhouse, mechanical equipment room, storage area, and an indoor pool enclosure are adequately heated and ventilated in accordance with R 325.2113a.

(2) A swimming pool owner shall ensure that swimmers cannot come in contact with a heating unit.

(3) A swimming pool owner shall ensure that room ventilation and dehumidification prevent direct drafts on swimmers and minimize condensation.

(4) A swimming pool owner shall ensure that condensate from a pool enclosure dehumidification system is routed to waste only and is not routed to the pool.

History: 2001 AACCS.

R 325.2183 Water slide pools.

Rule 83. (1) This rule applies to water slide pools, water slide flumes, and other types of swimming pools that have water slide additions. In addition, water slide pools shall meet the requirements of R 325.2113a.

(2) A swimming pool owner shall install a water slide flume at a swimming pool in accordance with R 408.801 et seq.

(3) A swimming pool owner shall ensure that a water slide pool is designed and installed with sufficient length, width, and depth to bring riders to a complete stop and allow them to exit the pool in a safe manner.

(4) A water slide pool owner shall equip a water slide pool with a flume surge reservoir tank or other means designed to maintain the landing pool skimming water level.

(5) A swimming pool owner shall ensure that a swimming pool to which a water slide flume is added meets all of the following requirements:

(a) Has a turnover time by pool type as required in R 325.2136.

(b) Has an unobstructed walkway around the entire water slide flume support structure and which is within the pool enclosure.

(c) Has sufficient water surface area and volume so that the operational pool water level is not changed by more than 1 inch by the operation of all flume pumps. If the water surface area and volume is not sufficient, then the pool owner shall provide a means to maintain the skimming water level.

(d) Has a distance from the exit end of the flume to 1 or more means of egress located on the flume exit end wall or on an adjacent wall to facilitate the safe exit of riders from the pool.

(5) A pool owner shall ensure that a flume surge reservoir tank meets all of the following requirements:

(a) Has a surge capacity equal to a minimum of 2 minutes of combined flow from all pumps on the tank.

(b) Is accessible for cleaning and maintenance.

(c) Is protected from unauthorized entry.

(6) A pool owner shall ensure that flume pump suction meets both of the following requirements:

- (a) Are designed to prevent entrapment.
- (b) Are taken from the flume surge reservoir tank when the tank is provided.

History: 2001 AACs.

R 325.2184 Poolside slides.

Rule 84. (1) A pool owner shall not install a poolside slide without prior approval from the department. A pool owner shall ensure that the poolside slide design and construction features, ladders, and handrails conform to the requirements of the slide manufacturer.

(2) A pool owner shall ensure that the poolside slide is positioned relative to all of the following to provide for the safety of persons using the slide and the pool:

- (a) The edge of a swimming pool.
- (b) Adjacent pool walls.
- (c) Lifelines.
- (d) Diving boards.
- (e) Other poolside slides.
- (f) Water slide flumes.
- (g) Pool ladders.
- (h) Stairways.

(3) A pool owner shall ensure that the poolside slide meets all of the following requirements:

- (a) Is constructed in accordance with the manufacturer's recommendations.
- (b) Has a runway height of not more than 10 feet above the walkway or deck.
- (c) Has the exit end not higher than 18 inches above the normal pool water surface.
- (d) Has the exit end overhang the edge of a pool not less than 6 inches.
- (e) Has a water depth of not less than 4.5 feet at the exit end, which shall be maintained for a distance of not less than 10 feet out from the exit end and for 3 feet on either side of the projected centerline.
- (f) Has a distance of not less than 16.5 feet from the exit end to a wall ahead.
- (g) Has a distance of not less than 3.5 feet from the projected centerline of the exit end parallel to any of the following:
 - (i) A lifeline.
 - (ii) A pool sidewall.
 - (iii) The side of a diving board.
 - (iv) The side of a water slide flume.
 - (v) The side of another poolside slide.
- (h) Has a distance of not less than 10 feet, measured along the projected centerlines, from the intersection of the exit end of any of the following:
 - (i) The poolside slide.
 - (ii) A diving board.
 - (iii) A water slide flume.
 - (iv) Another poolside slide.
- (i) Has a distance of not less than 10 feet, measured along the projected centerline, from the exit end of the poolside slide to the intersection with a lifeline.

(4) A pool owner shall permanently affix signs or labels to a slide, as provided by the manufacturer, warning against any of the following:

- (a) Headfirst sliding.
- (b) Diving from anywhere on the slide.
- (c) Other misuses of the slide.

History: 2001 AACS.

PART 3. OPERATION AND USE

R 325.2191 Pool doors and gates; use of safety equipment; surface maintenance; storage of chemicals; suits and towels; soap; trampolines.

Rule 91. (1) A swimming pool owner shall ensure that a door or a gate in a swimming pool enclosure is in compliance with all of the following provisions:

- (a) Is kept closed.
- (b) Is locked while the swimming pool and the deck are not open for use.
- (c) A service entrance door or gate is locked while the swimming pool is open for use.

(2) A swimming pool owner shall ensure that safety equipment is used only for its intended purpose and is not removed from its established location.

(3) A swimming pool owner shall keep a lifeline in its intended place, except when removed for supervised activity.

(4) A swimming pool owner shall keep all surfaces within a swimming pool enclosure, bathhouse, and related facilities clean, sanitary, and in good repair.

(5) A swimming pool owner shall store chemicals in the original container that has a label, away from flammables and heat, and in a clean, dry, and well-ventilated place which prevents unauthorized access to it and which prevents accidental spillage and mixing with other chemicals.

(6) If swimming suits or towels, or both, are furnished to swimming pool users, then the pool owner shall thoroughly launder the suits and towels after each use. The pool owner shall keep the supply of clean suits and towels separated in storage and handling from used, unlaundered suits and towels.

(7) A pool owner shall provide soap at each lavatory and at each shower.

(8) A pool owner may have a trampoline accessible for use only if the owner provides adequate supervision

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2192 Swimming pool use.

Rule 92. (1) A swimming pool owner shall ensure that a person who has any of the following medical conditions is excluded from a swimming pool, except that the person may be granted use of a swimming pool upon a written determination by the department, a personal physician, or a local health officer that the condition will not affect the health of other persons using the pool:

- (a) An infectious or communicable disease.

- (b) A possibly infectious condition, such as a cold, skin eruption, or open blister.
- (2) A swimming pool owner or his or her representative may require a person who uses a swimming pool to take a cleansing shower before entering the swimming pool enclosure.
- (3) A swimming pool owner shall ensure that the bathing apparel worn in a swimming pool is clean.
- (4) A person shall not spit in, or otherwise pollute, swimming pool water or related facilities.
- (5) A swimming pool owner shall ensure that running or boisterous or rough play, is not permitted in a swimming pool enclosure or bathhouse.
- (6) A swimming pool owner shall ensure that a person wearing street clothes or shoes, is not permitted in a swimming pool.
- (7) A swimming pool owner shall ensure that glass, other breakable materials, or an object or material that might create a hazardous condition or interfere with the efficient operation of the swimming pool are not permitted in a swimming pool enclosure. A swimming pool owner shall post a sign that prohibits glass, other breakable materials, and hazardous objects or materials in the pool enclosure.
- (8) If the owner or operator allows food or drink and associated articles in a swimming pool enclosure, then the owner or operator shall comply with all of the following provisions:
 - (a) Provide poolside control to maintain safe and sanitary conditions.
 - (b) Not permit food preparation in a swimming pool enclosure.
 - (c) Prominently display a sign conveying requirements for safe and sanitary disposal of all food wastes and precluding consumption of food and beverages within the pool.
- (9) A swimming pool owner shall ensure that the consumption of alcoholic beverages in a spa pool is not permitted.
- (10) A swimming pool owner shall prominently display, at the pool, a sign warning against the use of a pool after the consumption of alcoholic beverages.
- (11) A swimming pool owner shall ensure that a pet or other animal, except for a trained guide dog accompanying a person who has a disability, is not permitted in a swimming pool enclosure. A guide dog is not permitted in a pool.
- (12) A swimming pool owner shall ensure that diving is not permitted from the edge of a pool at any location where the water depth is less than 5 feet.
- (13) A swimming pool owner shall remove starting platforms or make them physically nonusable after any type of competitive usage, except as provided by R 325.2135. A swimming pool owner shall ensure that starting platforms are not used for any noncompetitive use.

History: 1979 AC; 1983 AACCS; 2001 AACCS.

R 325.2193 Bather capacity limits.

Rule 93. (1) A swimming pool owner shall ensure that the number of persons in bathing apparel within a swimming pool enclosure does not exceed the bather capacity limit established by the department or local health department.

(2) A swimming pool owner shall ensure that the bather capacity limit or maximum bather load is not more than the following number of persons, as applicable:

- (a) Seven persons per 100 square feet of water surface area where the water depth is not more than 5 feet.
- (b) Four persons per 100 square feet of water surface area where the water depth is more than 5 feet.
- (c) One person per 100 square feet of walkway and usable deck area within the swimming pool enclosure.
- (d) One person for every 2 lineal feet of spa pool bench inner perimeter, excluding the means of egress.
- (3) The department may establish a smaller bather capacity limit for irregular conditions.
- (4) A swimming pool owner shall prominently display the bather capacity limit within the swimming pool enclosure.

History: 1979 AC; 1983 AAC; 2001 AAC.

R 325.2194 Water quality standards.

- Rule 94. (1) A swimming pool owner shall maintain a suitable free available residual of the disinfectant throughout the swimming pool water.
- (2) A swimming pool owner shall test the water before and during each period of swimming pool use, at a frequency of at least once per day, to assure the maintenance of pH and disinfectant residuals as established by table 3 of this rule.
- (3) A swimming pool owner shall ensure that the minimum free available disinfectant residual maintained, in milligrams per liter, satisfies the specifications of table 3 of this rule.
- (4) Table 3 reads as follows:

Table 3		
Disinfectant Residuals (Milligrams per liter)		
Disinfectant	pH	
	7.2 to 7.5	More than 7.5 to 8.0
Bromine	2.0	2.0
Chlorine	1.0	2.0
Chlorinated cyanurate*	2.0	4.0

*At 20 to 40 parts per million (ppm) cyanuric acid (cya). For higher levels of cya, add 0.5 mg/l for each additional 20 ppm cya, or fraction of 20 ppm above 40 ppm.

- (5) The minimum disinfectant residual maintained with a different disinfectant shall be that which is as effective as provided in R 325.2156.
- (6) When a cyanurate is used, a swimming pool owner shall ensure that the cyanuric acid level of the swimming pool water is not more than 80 milligrams per liter and is tested at least once each week and more frequently if necessary.

(7) A swimming pool owner shall ensure that the water temperature of a swimming pool is not more than 104 degrees Fahrenheit.

(8) A swimming pool owner shall prominently display at the pool, a caution sign, acceptable to the department, stating the maximum operating water temperature, other pertinent health warnings, and warning against the use of the pool by young children when the normal water temperature is more than 86 degrees Fahrenheit.

(9) A swimming pool owner shall ensure that a swimming pool is used only when the water is sufficiently clear to readily discern either of the following from the edge of the pool:

(a) The entire bottom of the pool.

(b) The main outlet grating from a horizontal distance up to 30 feet.

(10) If a swimming pool becomes polluted with feces, vomit, sewage, or other material, then the owner shall immediately close the pool from use and take actions to mitigate the pollution and restore water quality. The owner or operator may reopen the pool according to the contingency plan adopted by the owner under R 325.2194a and available for review by the department or local health department, if there is no approved contingency plan, then the owner shall obtain approval to reopen the pool from the department or local health department.

(11) A swimming pool owner shall promptly remove visible dirt on the bottom of a swimming pool or floating on the water surface.

(12) A spa pool owner shall drain, clean, sanitize, and refill a spa pool at a frequency acceptable to the department or local health department as necessary to maintain sanitary conditions.

History: 1979 AC; 1983 AACs; 2001 AACs.

R 325.2194a Contingency and emergency response plans.

Rule 94a. (1) The owner of a swimming pool shall prepare and implement a contingency and emergency response plan. The owner of a swimming pool shall have the contingency and emergency response plan available for review at the pool.

(2) The contingency plan shall, at a minimum, outline a program for rapid mitigation of contamination or water quality deterioration according to R 325.2194.

(3) The emergency response plan shall outline minimum topics including the following:

(a) Rescues and submersions.

(b) Equipment failure.

(c) Injury requiring medical attention

(d) Other conditions or events that create a hazard to the health and safety of persons using the pool.

History: 2001 AACs.

R 325.2195 Collection and analyses of water samples for coliform bacteria.

Rule 95. (1) The owner of a public swimming pool shall be responsible for the collection and the examination of water samples for coliform bacteria at a frequency of at least once

per quarter. The department or local health department may determine whether additional monitoring is needed if necessary to protect the public health.

(2) A swimming pool owner or operator shall ensure that all water samples are analyzed for total coliform bacteria at the state laboratory or a laboratory certified by the department or by the United States Environmental Protection Agency to analyze drinking water.

(3) The presence of total coliform bacteria or pathogenic organisms in the water sample is unacceptable water quality. A heterotrophic plate count of more than 200 bacteria per milliliter in a sample is unacceptable water quality.

History: 1979 AC; 1983 AAC; 2001 AAC.

R 325.2196 Water treatment.

Rule 96. (1) A swimming pool owner or operator shall continuously recirculate, filter, and disinfect swimming pool water 24 hours per day at a flow rate sufficient to recirculate the swimming pool volume of water within the time period required by R 325.2136, without interruption, except for cleaning the filters or for other maintenance and repairs.

(2) A swimming pool owner or operator shall ensure that a swimming pool is not used when its water treatment equipment is not functioning properly.

(3) A swimming pool owner or operator shall maintain the water level in a swimming pool at an elevation suitable for continuous skimming flow into the overflow system without flooding it.

(4) A swimming pool owner or operator shall use only the chemical that a chemical feeder manufacturer specifies for application by the chemical feeder.

History: 1979 AC; 1983 AAC; 2001 AAC.

R 325.2197 Presence of person qualified to test water and operate water treatment equipment required; "qualified person" and "readily available" defined.

Rule 97. (1) A swimming pool owner shall ensure that a qualified person who is responsible for testing the water and for operating the water treatment equipment of a swimming pool is readily available when the pool is open for use.

(2) As used in this rule, "readily available" means any of the following:

(a) In any of the following locations:

(i) The pool enclosure.

(ii) The mechanical equipment room.

(iii) Adjacent offices.

(iv) Other rooms adjacent to the pool enclosure.

(v) On the premises.

(b) On-call within 15 minutes of travel time to the pool.

(c) At another suitable location acceptable to the department or local health department.

(3) As used in this rule, "qualified person" means a person who is familiar with swimming pool operation and who is authorized by the owner to operate the pool mechanical equipment, close the pool when necessary, test the pool water, and adjust the pool water chemical parameters.

History: 1979 AC; 1983 AAC; 2001 AAC.

R 325.2198 Lifeguards.

Rule 98. (1) A swimming pool owner or operator shall provide lifeguard service at a swimming pool, other than a wading pool or a spa pool, if any of the following provisions apply to the swimming pool:

(a) The pool is owned or operated by a government, a governmental subdivision or agency, a public corporation, or a school.

(b) The total water surface area within the swimming pool enclosure is more than 2,400 square feet.

(c) A diving board is provided.

(2) If lifeguard service is required by subrule (1) of this rule, then a swimming pool owner or operator shall ensure that 1 lifeguard for every 75 people within the swimming pool is on duty in the enclosure when the swimming pool is open for use. The department may waive this requirement if a contingency plan has been adopted by the owner and approved by the department under R 325.2194a.

(3) A lifeguard shall meet all of the following requirements:

(a) Be a capable swimmer and be competent in lifeguarding techniques.

(b) Have satisfactorily completed a recognized course of instruction in adult, child, and infant cardiopulmonary resuscitation with training in 2-person and resuscitation barriers of the type offered by the American Red Cross, the American Heart Association, or the National Safety Council. A swimming pool owner or operator shall post valid and current evidence of successful completion of the course at the swimming pool when it is open for use.

(c) At a minimum, have satisfactorily completed a nationally recognized course of instruction, such as any of the following:

(i) The American Red Cross lifeguarding course.

(ii) The Young Men's Christian Association lifeguard course.

(iii) The National Pool and Waterpark Pool Lifeguard course.

(iv) An equivalent lifeguard training course approved by the department. A swimming pool owner or operator shall post valid and current evidence of successful completion of the course at the swimming pool when it is open for use.

(d) Be dressed in suitable swimming attire which allows the lifeguard to be suitably prepared to enter the water and act in an emergency and which allows persons in the enclosure to be able to readily identify the lifeguard.

(e) Ensure the proper supervision of instructional and recreational aquatic activities in the pool enclosure. Activities that would distract from the proper supervision of persons using the swimming pool or prevent immediate attention to a person in distress are prohibited. An instructor, teacher, or coach meeting the lifeguard requirements of this rule shall directly supervise swimming programs, such as any of the following:

(i) Recreational swimming.

(ii) Lap swimming.

(iii) Competitive swimming.

(iv) Water exercise classes.

(v) Swimming lessons.

(vi) Scuba lessons.

(vii) Physical education classes.

If a supervising instructor, teacher, or coach does not meet the lifeguard requirements of this rule, then a swimming pool owner or operator shall provide a separate lifeguard who meets the requirements of this rule.

(f) Have the authority to enforce, and be responsible for enforcing rules pertaining to safety and sanitation.

(4) The department shall maintain a listing of cardiopulmonary resuscitation courses and lifeguarding courses that the department determines is equivalent to the type of course required by subrule (3)(a), (b), or (c) of this rule. The agencies offering the other courses are responsible for providing sufficient evidence to the department to determine course equivalency.

(5) At a swimming pool where lifeguard service is not required by subrule (1) of this rule and is not provided, a swimming pool owner or operator shall prominently display a sign warning that there is no lifeguard on duty. The owner or operator shall ensure that the sign has legible letters that are not less than 4 inches high.

History: 1979 AC; 1983 AACS; 2001 AACS.

R 325.2199 Operation reports.

Rule 99. (1) A swimming pool operator shall record the following information daily on a report form furnished by or acceptable to the department:

(a) Swimming pool operational data.

(b) Information about rescues, submersions, and accidents given medical attention.

(2) The operator shall submit a completed operation report to the department or the local health department in compliance with either of the following provisions:

(a) Within 10 days after the end of each month in which the swimming pool was in operation.

(b) According to an alternative submission schedule approved in writing by the department or local health department.

History: 1979 AC; 1983 AACS; 2001 AACS.