

# The Office of Senator Amanda L. Shelton

Legislative Secretary & Chairwoman Committee on Higher Education and the Advancement of Women, Youth and Senior Citizens I Mina'trentai Singko Na Liheslaturan Guåhan 35<sup>th</sup> Guam Legislature

July 12, 2019

Via Email:

guamcompiler@gmail.com gcepeda@guamcourts.org

Ms. Geraldine A. Cepeda Compiler of Laws 120 W O'Brien Drive Ste. 3000 Hagåtña, Guam 96910

Dear Ms. Cepeda,

*Hafa Adat*! I Liheslaturan Guåhan received Rules and Regulations from Department of Public Health and Social Services. This proposed rules and regulations need no further action from the 35<sup>th</sup> Guam Legislature. I have attached the word version of the proposed rules and regulations fcr your perusal. The pertinent documents can be found on the legislative website, at guamlegislature.com as messages and communications number **35GL-19-0236 and 35GL-19-0269**.

Please call Evelyn Claros, my Office Manager, should you have any questions or concerns. Thank you and *Si Yu'os Ma'åse!* 

Attested to:

Senator Amanda L. Sheltom

Legislative Secretary

Certified by:

Speaker Tina 35th Guam Legislature

CC: Legislative Legal Counsel All Senators Guam Department of Labor



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10	<b>RULES AND REGULATIONS FOR</b>
11	<b>PUBLIC SWIMMING POOLS</b>
12	Article 6
13	26 Guam Administrative Rules and Regulations
14	Division 1
15	Chanter 4
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24	DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES
25	<b>DIVISION OF ENVIRONMENTAL HEALTH</b>
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# §4601. Purpose.

2	The purpose of these rules and regulations is to repeal and replace existing rules and
3	regulations of the Department of Public Health and Social Services that govern PUBLIC SWIMMING
4	POOL sanitation for safeguarding public health and providing BATHERS a swimming environment
5	that is safe and conducive to good health. The Model Aquatic Health Code was utilized in the
6	development of these rules and regulations.
7	§4602. Authority.
8	Title 10 Guam Code Annotated (GCA), Chapter 21, Section 21102 authorizes the
9	DIRECTOR of the Department of Public Health and Social Services to establish rules and
10	regulations to carry out the provisions of Chapter 29, Title 10 GCA.
11	§4603. Title.
12	These rules and regulations shall be known as the "Rules and Regulations for Public
13	Swimming Pools."
14	§4604. Definitions.
15	(a) Agitated Water means a PUBLIC SWIMMING POOL with mechanical means to
16	discharge, spray, or move the water's surface above and/or below the static water line of the PUBLIC
17	SWIMMING POOL. Where there is no static water line, movement shall be considered above the
18	deck plane.
19	(b) <i>Backflow</i> means a hydraulic condition caused by a difference in water pressure that
20	causes an undesirable reversal of the flow as the result of a higher pressure in the system than in
21	its supply.
22	(c) <i>Barrier</i> means an obstacle intended to prevent direct access from one point to
23	another.

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(d) *Bather* means a person at a PUBLIC SWIMMING POOL who has contact with water
 either through spray, or partial or total immersion. The term BATHER as defined, also includes
 staff members, and refers to those users who can be exposed to contaminated water, as well as
 potentially contaminate the water.

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(e) *Chemical Storage Space* means a space in a PUBLIC SWIMMING POOL facility used for the STORAGE of POOL chemicals such as acids, salt, or corrosive or oxidizing chemicals.

(f) 7 *Chlorine* means an element that at room temperature and pressure is a heavy greenish yellow gas with a characteristic penetrating and irritating smell; it is extremely toxic. It 8 9 can be compressed in liquid form and stored in heavy steel tanks. When mixed with water, CHLORINE gas forms hypochlorous acid, the primary CHLORINE-based disinfecting agent, 10 hypochlorite ion, and hydrochloric acid. Hypochlorous acid dissociation to hypochlorite ion is 11 highly pH dependent. CHLORINE is a general term which refers to hypochlorous acid and 12 hypochlorite ion in aqueous solution derived from CHLORINE gas or a variety of CHLORINE-based 13 14 disinfecting agents.

Available Chlorine means the amount of CHLORINE in the +1 oxidation (1)15 state, which is the reactive, oxidized form. In contrast, chloride ion (Cl) is in the -1 16 17 oxidation state, which is the inert, reduced state. AVAILABLE CHLORINE is subdivided into Free Available CHLORINE and Combined Available CHLORINE. 18 POOL chemicals 19 containing AVAILABLE CHLORINE are both oxidizers and disinfectants. Elemental 20 CHLORINE ( $Cl_2$ ) is defined as containing 100% AVAILABLE CHLORINE. The concentration 21 of AVAILABLE CHLORINE in water is normally reported as mg/L (ppm) "as Cl<sub>2</sub>," that is, the 22 concentration is measured on a Cl<sub>2</sub> basis, regardless of the source of the AVAILABLE 23 CHLORINE.

1 (2) *Combined Chlorine* means that portion of the total residual CHLORINE that 2 is combined with ammonia or nitrogen compounds and will not react with undesirable or 3 pathogenic organisms.

(3)Free Chlorine Residual, or Free Available Chlorine (FAC), means the 4 portion of the total AVAILABLE CHLORINE that is not "combined chlorine" and is present 5 6 as hypochlorous acid (HOCl) or hypochlorite ion (OCl<sup>-</sup>). The pH of the water determines the relative amounts of hypochlorous acid and hypochlorite ion. HOCl is a very effective 7 bactericide and is the active bactericide in POOL water. OCl is also a bactericide, but acts 8 more slowly than HOCl. Thus, CHLORINE is a more effective bactericide at low pH than 9 at high pH. A FREE CHLORINE RESIDUAL must be maintained for adequate DISINFECTION. 10 *Contaminant* means a substance that soils, stains, corrupts, or infects another 11 (g) substance by contact or association. 12

(h) *Critical Item* means a provision of this rules and regulations, that, if in
 noncompliance, is more likely than other violations to contribute to contamination, illness, or
 environmental health hazard.

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

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

4 (k) *Deck* means surface areas serving the PUBLIC SWIMMING POOL, including the dry
5 DECK, perimeter/wet DECK, and POOL DECK.

- 6 (1) *Perimeter Deck* means the hardscape surface area immediately adjacent to 7 and within four feet of the edge of the PUBLIC SWIMMING POOL; also known as the "wet 8 deck" area.
- 9 (2) *Pool Deck* means the surface areas serving the PUBLIC SWIMMING POOL,
  10 beyond PERIMETER DECK, which is expected to be regularly trafficked and made wet by
  11 BATHERS.

12 (l) *Department* means the Guam Department of Public Health and Social Services.

(m) *Diaper-Changing Station* means a hygiene station that includes a diaper-changing
 unit, handwashing sink, soap and dispenser, a means for drying hands, trash receptacle, and
 disinfectant products to clean after use.

16 (n) *Diaper-Changing Unit* means a diaper-changing surface that is part of a DIAPER17 CHANGING STATION.

(o) *Director* means the Director of the Department of Public Health and Social Services
or his/her designated representative.

20 (p) *Disinfection* means a treatment that kills or irreversibly inactivates microorganisms 21 (e.g., bacteria, viruses, and parasites); in water treatment, a chemical (commonly CHLORINE, 22 chloramine, or ozone) or physical process (e.g., ultraviolet radiation) can be used. 1 (q) *Enclosure* means an uninterrupted constructed feature or obstacle used to surround 2 and secure an area that is intended to deter or effectively prevent unpermitted, uncontrolled, and 3 unfettered access. It is designed to resist climbing and to prevent passage through it and under it.

4 (r) *Equipment Room* means a space intended for the operation of POOL pumps, filters,
5 heaters, and controllers. This space is not intended for the STORAGE of hazardous POOL chemicals.

6 (s) *Flat Water* means a PUBLIC SWIMMING POOL in which the water line is static except
7 for movement made by users.

8 (t) *Flume* means the riding channels of a WATERSLIDE which accommodate riders 9 using or not using mats, tubes, rafts, and other transport vehicles as they slide along a path 10 lubricated by a water flow.

(u) *Foot Bath* means standing water in which BATHERS or PUBLIC SWIMMING POOL
staff rinse their feet.

(v) *Ground-Fault Circuit Interrupter or GFCI* means a device for protection of
 personnel that de-energizes an electrical circuit or portion thereof in the event of excessive ground
 current.

(w) *Handwashing Station* means a location which has a handwashing sink, adjacent
soap with dispenser, hand drying device or paper towels and dispenser, and trash receptacle.

18 (x) Hot Water means a PUBLIC SWIMMING POOL with a water temperature over  $90^{\circ}$ F.

(y) *Hygiene Facility* means a structure or part of a structure that contains toilet,
 SHOWER, DIAPER-CHANGING UNIT, HANDWASHING STATION, and dressing capabilities serving
 BATHERS and PATRONS at a PUBLIC SWIMMING POOL.

(z) *Imminent Health Hazard* means a significant threat or danger to health that is
 considered to exist when there is evidence sufficient to show that a product, practice, circumstance,

or event creates a situation that requires immediate correction or cessation of operation to prevent
injury based on the number of potential injuries, and the nature, severity, and duration of the
anticipated injury.

4 (aa) *Indoor Swimming Pool* means a physical place that contains one or more PUBLIC
5 SWIMMING POOL and the surrounding BATHER and spectator/stadium seating areas within a
6 structure that meets the definition of "Building" per the International Building Code. It does not
7 include equipment, chemical STORAGE, or BATHER hygiene rooms or any other rooms with a direct
8 opening to the PUBLIC SWIMMING POOL facility. Otherwise known as a natatorium.

9 (ab) *Inlet* means wall or floor fittings where treated water is returned to the POOL.

(ac) *Lazy River* means a channeled flow of water of near-constant depth in which the
water is moved by pumps or other means of propulsion to provide a river-like flow that transports
BATHERS over a defined path. A LAZY RIVER may include play features and devices. A LAZY
RIVER may also be referred to as a tubing POOL, leisure river, leisure POOL, or a current channel.

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

(ae) *Patron* means a BATHER or other person or occupant at a PUBLIC SWIMMING POOL
who may or may not have contact with PUBLIC SWIMMING POOL water either through partial or
total immersion. PATRONS may not have contact with PUBLIC SWIMMING POOL water, but could
still be exposed to potential contamination from the PUBLIC SWIMMING POOL facility air, surfaces,
or aerosols.

(af) Perimeter Gutter System, or Perimeter Overflow System (POS), means the
 alternative to SKIMMERS as a method to remove water from the POOL's surface for treatment. The
 gutter provides a level structure along the POOL perimeter versus intermittent SKIMMERS.

4 (ag) *Person* means any person, firm, partnership, association, corporation, company,
5 governmental agency, club or organization of any kind.

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

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

(aj) *Public Swimming Pool* means any SWIMMING POOL that is available for public use,
whether for a fee or free of charge, or any SWIMMING POOL used by any business, partnership,
corporation or PERSON for the use of their customers, clients, guests or employees including, but
not limited to: a commercial POOL; a community POOL or POOL at a hotel, motel, resort, auto park,
trailer park, apartment house, or other multiple rental unit; private club; public club; and public or
private school, gymnasium, or health establishment.

(ak) *Qualified Lifeguard* means an individual who has successfully completed a
 lifeguard training course offered by a training agency recognized by the DEPARTMENT, holds a
 current certificate for such training, has met the pre-service requirements, and is participating in
 continuing in-service training requirements of the PUBLIC SWIMMING POOL facility.

(al) *Qualified Operator* means an individual responsible for the operation and
maintenance of the water and air quality systems and the associated infrastructure of the PUBLIC
SWIMMING POOL facility, and who has successfully completed a recognized operator training
course to operate a PUBLIC SWIMMING POOL offered by a recognized training agency, and holds a
current certificate for such training.

(am) *Recessed Steps* means a way of ingress/egress for a POOL similar to a ladder but the
 individual treads are recessed into the POOL wall.

(an) *Recirculation System* means the combination of the main drain, gutter or SKIMMER,
 INLETS, piping, pumps, controls, surge tank or balance tank to provide POOL water recirculation
 to and from the POOL and the treatment systems.

(ao) *Runout* means that part of a WATERSLIDE where riders are intended to decelerate
and/or come to a stop. The RUNOUT is a continuation of the WATERSLIDE FLUME surface.

(ap) *Safety* (as it relates to construction items) means a design STANDARD intended to
prevent inadvertent or hazardous operation or use (i.e., a passive engineering strategy).

(aq) *Sanitize* means reducing the level of microbes to that considered safe by public
health STANDARDS (usually 99.999%). This may be achieved through a variety of chemical or
physical means including chemical treatment, physical cleaning, or drying.

22 (ar) *Saturation Index* means a mathematical representation or scale representing the
23 ability of water to deposit calcium carbonate, or dissolve metal, concrete or grout.

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(as) Secondary Disinfection Systems means those DISINFECTION processes or systems
 installed in addition to the STANDARD systems required on all PUBLIC SWIMMING POOLS, which
 are required to be used for increased risk PUBLIC SWIMMING POOLS.

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(at) *Shower* means a device that sprays water on the body.

5 (1) *Cleansing Shower* means a SHOWER located within a HYGIENE FACILITY
6 using warm water and soap. The purpose of these SHOWERS is to remove CONTAMINANTS
7 including perianal fecal material, sweat, skin cells, personal care products, and dirt before
8 BATHERS enter the PUBLIC SWIMMING POOL.

9 (2) *Rinse Shower* means a SHOWER typically located in the POOL DECK area 10 with ambient temperature water. The main purpose is to remove dirt, sand, or organic 11 material prior to entering the PUBLIC SWIMMING POOL to reduce the introduction of 12 CONTAMINANTS and the formation of DISINFECTION by-products.

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

16 (av) *Slide* means a PUBLIC SWIMMING POOL feature where users slide down from an
17 elevated height into water.

18 (1) *Drop Slide* means a SLIDE that drops BATHERS into the water from a height
19 above the water versus delivering the BATHER to the water entry point.

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(2) *Pool Slide* means a SLIDE having a configuration as defined in The Code of Federal Regulations *(CFR)* Chapter II, Title 16, Part 1207 by CSPC, or is similar in construction to a playground slide used to allow users to slide from an elevated height to a

POOL. They shall include children's (tot) SLIDES and all other non-FLUME SLIDES that are
 mounted on the POOL DECK or within the basin of a PUBLIC SWIMMING POOL.

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(3) *Waterslide* means a SLIDE that runs into a LANDING POOL or RUNOUT through a fabricated channel with flowing water.

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

9 (ax) *Standard* means something established by authority, custom, or general consent as
10 a model or an example.

(ay) *Storage* means the condition of remaining in one space for one hour or more.
Materials in a closed pipe or tube awaiting transfer to another location shall not be considered to
be stored.

14 (az) *Substantial Alteration* means the alteration, modification, or renovation of a PUBLIC
15 SWIMMING POOL where the total cost of the work exceeds 50% of the replacement cost of the
16 PUBLIC SWIMMING POOL.

17 (ba) *Swimming Pool, or Pool,* means any artificial structure, basin, chamber, or tank 18 constructed of impervious material used or intended to be used for swimming, diving, or 19 recreational bathing. It does not include conventional bathtubs where the primary purpose is the 20 cleaning of the body, or individual therapeutic tubs.

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(1) *Diving Pool* means a PUBLIC SWIMMING POOL used exclusively for diving.

Landing Pool means a PUBLIC SWIMMING POOL or designated section of a

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23 PUBLIC SWIMMING POOL located at the exit of one or more WATERSLIDE FLUMES. It is the

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(2)

body of water intended and designed to receive a BATHER emerging from the FLUME for
the purpose of terminating the slide action and providing a means of exit to a DECK or
walkway area.

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(3) *Skimmer Pool* means a POOL using a SKIMMER system.

5 (4) *Surf Pool* means any POOL designed to generate waves dedicated to the 6 activity of surfing on a surfboard or analogous surfing device commonly used in the ocean 7 and intended for sport, as opposed to general play intent for WAVE POOLS.

- 8 (5) *Therapy Pool* means a POOL used exclusively for aquatic therapy, physical
  9 therapy, and/or rehabilitation to treat a diagnosed injury, illness, or medical condition,
  10 wherein the therapy is provided under the direct supervision of a licensed physical
  11 therapist, occupational therapist, or athletic trainer. This could include wound patients or
  12 immunocompromised patients whose health could be impacted if there is not additional
  13 water quality protection.
- 14 (6) Wading Pool means an artificial basin, chamber, or tank constructed of
  15 impervious material used, or intended to be used, for wading by small children and having
  16 a maximum depth not to exceed 18 inches at the deepest point and not more than 12 inches
  17 in depth at the side walls.
- 18 (7) *Wave Pool* means any POOL designed to simulate breaking or cyclic waves 19 for purposes of general play. A WAVE POOL is not the same as a SURF POOL, which 20 generates waves dedicated to the activity of surfing on a surfboard or analogous surfing 21 device commonly used in the ocean and intended for sport as opposed to general play intent 22 for WAVE POOLS.

(bb) *Theoretical Peak Occupancy* means the anticipated peak number of BATHERS in a
 PUBLIC SWIMMING POOL, or the anticipated peak number of occupants of the DECKS of a PUBLIC
 SWIMMING POOL facility. This is the lower limit of peak occupancy to be used for design purposes
 for determining services that support occupants. THEORETICAL PEAK OCCUPANCY is used to
 determine the number of SHOWERS. For PUBLIC SWIMMING POOL, the THEORETICAL PEAK
 OCCUPANCY is calculated around the type of water use or space.

7 (bc) *Turnover, or Turnover Rate,* means the period of time, usually expressed in hours,
8 required to circulate a volume of water equal to the capacity of the PUBLIC SWIMMING POOL.

9 (bd) *Variance* means a written document issued by the DIRECTOR, not his/her 10 representative, that authorizes a modification or waiver of one or more requirements of these rules 11 and regulations if, in the opinion of the DIRECTOR, a health hazard or nuisance will not result from 12 the modification or waiver.

13 **§4605. Scope.** 

These rules and regulations shall apply to all PUBLIC SWIMMING POOLS as defined herein,
except private SWIMMING POOL maintained by an individual for the use of his family and friends.
These rules and regulations shall apply to all auxiliary structures and equipment thereof
such as POOL DECKS, diving boards, locker rooms, SHOWER and dressing rooms, toilet facilities,
and filtration, pumping, piping, disinfecting, and SAFETY equipment provided and maintained in
connection with such facility.

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## §4606. Sanitary Permit.

(a) No PERSON shall directly or indirectly in any manner, conduct, control, manage,
 maintain, or operate a PUBLIC SWIMMING POOL unless a valid Sanitary Permit issued by the
 DEPARTMENT to operate such a facility has been obtained and posted. Any PERSON, before
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constructing a new PUBLIC SWIMMING POOL, or making SUBSTANTIAL ALTERATION of an existing
 facility shall first submit plans and specifications of such facility or changes to the DIRECTOR for
 approval.

(b) An application for a Sanitary Permit to operate all new or existing PUBLIC
SWIMMING POOL shall be made in writing on a form prescribed by the DEPARTMENT, signed by
the applicant or his authorized agent, and shall contain such information that will determine that
the facility and its operation are in compliance with the applicable provisions of these rules and
regulations.

9 (c) Before the application for a Sanitary Permit shall be approved, the DEPARTMENT 10 shall verify that the facility meets the minimum sanitary requirements and STANDARDS by means 11 of a pre-operational inspection. This shall include the access onto premises for assessment, 12 inspection, and/or investigation.

(d) Before a pre-operational inspection is conducted, plans and specifications shall be
submitted to the DIRECTOR in accordance with the requirements established in these rules and
regulations, which shall include the following:

16 (1) Site information indicating, at a minimum, the location of all utilities, wells,
17 topography, natural water features, and potential sources of surface drainage and pollution
18 which may affect the proposed PUBLIC SWIMMING POOL;

A plot plan including a general map and detailed scaled drawings of the
 PUBLIC SWIMMING POOL site plan or floor plan with detailed locations of each PUBLIC
 SWIMMING POOL and related features, and locations of all water supply facilities,
 sources of drinking water, public or private sewers and relative elevations of paved or

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other walkways and the EQUIPMENT ROOM floor with the elevations of storm and sanitary sewer inverts and street grade;

(3) Detailed scaled and dimensional drawings for each individual PUBLIC

SWIMMING POOL showing the following:

5 (i) Location and type of INLETS, overflows, drains, suction outlets,
6 overflow gutters or devices, piping, POOL water elevation, lighting, POOL markings,
7 surface materials, and POOL features such as ladders, stairs, diving boards, SLIDES,
8 and play features;

9 (ii) Location and type of DECK, curb, or walls enclosing the POOL, DECK
10 drains, walkways, flooring, area finishes, entries and exits, hose bibs, fences,
11 telephones, and area lighting;

(iii) A flow diagram showing the location, plan, elevation, and
schematics of filters, pumps, chemical feeders and interlocks, chemical controllers
and interlocks, supplementary DISINFECTION system, heaters, surge tanks,
BACKFLOW prevention assemblies, valves, piping, flow meters, gauges,
thermometers, test cocks, sight glasses, and drainage system;

17 (iv) A schematic layout of the EQUIPMENT ROOM showing accessibility
18 for installation and maintenance, and CHEMICAL STORAGE SPACES;

19 (v) Location and number of HYGIENE FACILITIES provided including
20 dressing rooms, lockers, SHOWERS, handwashing facilities, toilet fixtures, and
21 DIAPER-CHANGING STATIONS; and

(vi) Layout for zones of PATRON surveillance as specified in §4637 (e)
 showing features or design configurations that can impact PATRON surveillance.

#### §4607. Public Swimming Pool Design Standards and Construction.

2 (a) PUBLIC SWIMMING POOLS shall be constructed of reinforced concrete or
3 impervious and structurally sound materials which provide a smooth, easily cleaned, watertight
4 structure capable of withstanding the anticipated stresses for full and empty conditions.

5 (b) All materials shall be inert, non-toxic, resistant to corrosion, impervious, enduring,
6 and resistant to damages related to the environmental conditions of Guam.

7 (c) All corners formed by intersection of walls and floors shall be rounded.

8 (d) Wood, sand, or earth are not permitted as an interior finish in PUBLIC SWIMMING
9 POOL construction.

10 (e) A PUBLIC SWIMMING POOL and all associated structures thereto shall be so 11 shaped and arranged that maintenance of safe and sanitary conditions, and recirculation of the 12 water, are not impaired. An obstruction shall not extend into or above the PUBLIC SWIMMING 13 POOL so as to create a SAFETY hazard.

(f) The finished surface of the PUBLIC SWIMMING POOL wall and floor shall be
smooth, without cracks or open joints, non-slip, easily cleaned and light colored, except that a
marking may be inserted against a light background.

(g) PUBLIC SWIMMING POOL floors in areas less than three feet deep, underwater
benches, and all other floors and surfaces required to be slip-resistant shall have a minimum
dynamic coefficient of friction at least equal to the requirements of ANSI A137.1-2012 of 0.42 as
measured by the DCOF AcuTest.

(h) A hydrostatic relief valve and/or suitable under drain system shall be provided
where the water table exerts hydrostatic pressure to uplift the PUBLIC SWIMMING POOL when
empty or drained.

All vertical walls shall have a durable finish suitable for regular scrubbing and 1 (i) cleaning at the waterline. SKIMMER POOLS shall have a six-inch to 12-inch high waterline finish, 2 and gutter or PERIMETER OVERFLOW SYSTEM shall have a minimum finish height of two inches. 3 If dark colors are used for the POOL finish, these colors shall not extend more than 4 (j) 5 12 inches below the waterline. 6 (k) Except for special use POOLS, the slope of the floor for all POOLS with water depths 7 under five feet shall not exceed one-foot vertical drop for every 12-feet horizontal, and shall not 8 exceed one-foot vertical to three-feet horizontal for POOLS with water depths five foot and greater. 9 (1)Except as provided in (m) of this Section, floors and walls below the water line shall be white or light pastel in color such that from the POOL DECK a BATHER is visible on the 10 POOL floor and the following items can be identified: 11 (1)Algae growth, debris or dirt within the POOL, and 12 Cracks in the surface finish of the POOL, and 13 (2)14 (3)Marker tiles defined in §4620. An exception for the color and finish requirement in (1) of this Section shall be 15 (m) made for the following PUBLIC SWIMMING POOL components: 16 17 (1)Competitive lane markings; Dedicated competitive diving well floors; 18 (2)19 (3) Step or bench edge markings; 20 (4) POOLS shallower than 24 inches; 21 (5) Water line tiles; 22 (6) WAVE POOL and SURF POOL depth change indicator tiles; or 23 (7)Other designs approved by VARIANCE. 12.27.18 Page 16 of 76

(n) PUBLIC SWIMMING POOLS shall be free of recessed areas which will interfere with
 circulation of the water and with skimming action and SAFETY supervision of BATHERS.

3 (o) PERIMETER OVERFLOW GUTTERS and/or SKIMMERS meeting the requirements of
4 §4613 and §4614 shall be required on all PUBLIC SWIMMING POOLS.

5 Diving boards shall be permitted only when the diving envelope conforms to the (p) 6 STANDARDS of the certifying agency that regulates competitive diving at the PUBLIC SWIMMING POOL. If the PUBLIC SWIMMING POOL does not have competitive diving or certifying agency that 7 8 regulates competitive diving, then the diving envelope shall conform to the diving envelope 9 STANDARDS of Table 1, Table 2, Figure 1, and Figure 2. Starting platforms shall only be used for competitive swimming and training, and under the direct supervision of a coach or instructor. 10 Starting platforms shall be removed, if possible, or prohibited from use during all recreational or 11 non-competitive swimming activity by covering platforms with a manufacturer-supplied platform 12 cover or with another means or device that is readily visible and clearly prohibits use. 13

Table 1. Diving Board Dimensions				
Board Height	1.64 ft.	2.46 ft.	3.28 ft.	3.84 ft.
Board Length	10.0 ft.	12.0 ft.	16.0 ft.	16.0 ft.
Board Width	20.0 in.	20.0 in.	20.0 in.	20.0 in.

Table 2. Dimensions of Components Related to Diving Wells					
L F	etters below refer to igures 1 & 2		Minimum I	Dimensions	
Α	Distance from plummet back to pool wall	3.0 ft.	4.5 ft.	6.0 ft.	6.0 ft.
B	Distance from plummet to pool wall at side	10.0 ft.	10.0 ft.	10.0 ft.	11.5 ft.
С	Distance from plummet to adjacent plummet	8.83 ft.	8.83 ft.	8.83 ft.	8.54 ft.
D	Distance from plummet to pool wall ahead	26.0 ft.	27.83 ft.	29.58 ft.	33.67 ft.
Е	Height, board to ceiling at plummet & distances F and G	16.0 ft.	16.0 ft.	16.0 ft.	16.0 ft.
F	Clear overhead distance behind and each side of plummet	8.0 ft.	8.0 ft.	8.0 ft.	8.0 ft.
G	Clear overhead distance ahead of plummet	16.0 ft.	16.0 ft.	16.0 ft.	16.0 ft.
Н	Depth of water at plummet	9.5 ft.	10.75 ft.	12.0 ft.	12.5 ft.
J	Distance ahead of plummet to depth K	12.0 ft.	14.25 ft.	16.5 ft.	19.75 ft.
К	Depth at distance J ahead of plummet	8.75 ft.	10.0 ft.	11.28 ft.	12.17 ft.
L	Distance at each side of plummet to depth M	8.0 ft.	8.13 ft.	8.25 ft.	9.92 ft.
М	Depth at distance L on each side of plummet	9.08 ft.	10.33 ft.	11.63 ft.	12.17 ft.
N	Maximum slope to reduce height E	30°	30°	30°	30°
Р	Maximum floor slope to reduce depth ahead of K, to the sides of M, or back to pool wall behind H	3:1	3:1	3:1	3:1



Figure 2. Diving Platform Cross Section



(q) Where applicable, all equipment used, or proposed to be used, in PUBLIC
 SWIMMING POOLS shall be listed and labeled by an ANSI accredited certification organization, or
 have EPA registration, as applicable.

4 (r) At least one space dedicated to CHEMICAL STORAGE SPACE shall be provided to
5 allow safe STORAGE of the chemicals present. An emergency eye wash station shall be provided
6 in all CHEMICAL STORAGE SPACES. The CHEMICAL STORAGE SPACE shall be separate from the
7 EQUIPMENT ROOM.

8 (s) It shall be the responsibility of the Sanitary Permit holder of the PUBLIC SWIMMING 9 POOL to comply with all applicable codes (i.e., STANDARDS of Guam Fire Department and Guam 10 Environmental Protection Agency) when storing chemicals necessary for maintenance purposes, 11 operation, or sanitation of equipment in the EQUIPMENT ROOM.

(t) A carbon monoxide detector with local alarming, listed and labeled in accordance
with UL 2075, shall be installed in all EQUIPMENT ROOMS and rooms adjacent to spaces containing
fuel-burning equipment or vents carrying the products of combustion.

(u) Floors of an interior CHEMICAL STORAGE SPACE and EQUIPMENT ROOM shall be of
concrete or other suitable material having a smooth, slip resistant finish that is easily cleanable.
Openings or gaps on floors, walls, or ceilings shall be permanently sealed against air leakage.

18 (v) All doors opening into CHEMICAL STORAGE SPACES shall be equipped with 19 permanent signage warning against unauthorized entry, and specifying the expected hazards and 20 the location of the associated Safety Data Sheets. Doors shall be constructed of corrosion-resistant 21 materials and automatic lock to prevent unauthorized entry.

## §4608. Water Supply.

2 (a) The water supply serving the PUBLIC SWIMMING POOL and all PLUMBING
3 FIXTURES including drinking fountains, handwashing sinks, and SHOWERS shall come from an
4 approved public water system.

5 (b) The water supply shall have sufficient capacity to simultaneously serve all6 PLUMBING FIXTURES.

7 (c) If a spill spout is used at a PUBLIC SWIMMING POOL, the fill spout shall be located 8 so that it is not a SAFETY hazard to BATHERS. The open end of the fill spouts shall not have sharp 9 edges or protrude more than two inches beyond the edge of the POOL. The open end shall be 10 separated from the water by an air gap of at least 1 <sup>1</sup>/<sub>2</sub> pipe diameters measured from the pipe outlet 11 to the POOL.

12 (d) The potable water supply serving a PUBLIC SWIMMING POOL shall be protected13 against BACKFLOW consisting of either of the following:

14 (1) An acceptable air gap consisting of a vertical distance of not less than two
pipe diameters of the water supply pipe or six inches, whichever is greater, over the lowest
free-flowing discharge point of the receiving pipe, tank, or vessel. Splash guards that are
open to the atmosphere may be used around the air gap; or

18 (2) Where permitted, an approved reduced pressure zone BACKFLOW preventer
19 installed according to the plumbing code and the DEPARTMENT.

20

## §4609. Wastewater Disposal.

(a) The sewer system shall be adequate to serve all PLUMBING FIXTURES in the facility
including the SHOWERS, toilets, and related structures.

1 (b) There shall be no physical connection between the sewer system and any drain 2 from the PUBLIC SWIMMING POOL or RECIRCULATION SYSTEM. Any PUBLIC SWIMMING POOL or 3 gutter drain when discharged to the sewer system, storm drain, or other approved natural drainage 4 course shall connect through a suitable air gap so as to preclude possibility of backup of sewage 5 or waste into the PUBLIC SWIMMING POOL piping system.

6 (c) The sanitary sewer serving the PUBLIC SWIMMING POOL and auxiliary facilities 7 shall discharge to the public sewer system wherever possible. Where no such sewer is available, 8 the connection shall be made to a suitable disposal plant designed, constructed, and operated 9 properly.

10

## §4610. Depth Markings and Lines.

11 (a) Depth of water shall be plainly marked at or above the water surface on the vertical 12 wall next to the PUBLIC SWIMMING POOL, at maximum and minimum depths, at the points of 13 break between the deep and shallow portions, on both sides and at each end of the POOL, and 14 spaced at not more than twenty-five feet intervals measured peripherally. In addition, for water 15 less than five feet in depth, the depth shall be marked at one-foot depth intervals. The depth in the 16 diving areas shall be appropriately marked.

(b) Depth markers shall be positioned to be read from within the POOL and while
standing on the DECK facing the POOL. Depth markers shall be in numerals of four inches
minimum height and a color contrasting with background.

(c) Depth markers shall be marked in units of feet and inches. Abbreviations of "FT"
and "IN" may be used in lieu of "FEET" and "INCHES." Symbols for feet (') and inches (") shall
not be permitted on water depth signs. Metric units may be provided in addition to – but not in
lieu of – units of feet and inches.

(d) Lane lines or other markings on the bottom of a POOL shall not exceed ten inches
 in width. Decorative designs on the bottom or walls which give the illusion of being or mistaken
 for the human form are prohibited.

4 (e) For POOL water depths five feet or shallower, all DECK depth markers required in 5 these rules and regulations shall be provided with "NO DIVING" warning signs along with the 6 universal international symbol for "NO DIVING."

7 (f) For POOLS deeper than five feet, a line of contrasting color, not less than two inches
8 and not more than six inches in width, shall be clearly and permanently installed on the POOL floor
9 at the shallow side of the break in the floor slope, and extend up the POOL walls to the waterline.

(g) One foot to the shallow water side of the break in floor slope and contrasting band,
a SAFETY float rope shall extend across the POOL surface with the exception of WAVE POOLS, SURF
POOLS, and WATERSLIDE LANDING POOLS.

13

## §4611. Recirculation System.

(a) A RECIRCULATION SYSTEM consisting of one or more pumps, pipes, return
INLETS, suction outlets, tanks, filters, water conditioning and DISINFECTION equipment, and other
accessory equipment shall be provided to ensure effective distribution of treated water and
maintain a uniform disinfectant residual and pH throughout the PUBLIC SWIMMING POOL.

18 (b) All PUBLIC SWIMMING POOLS shall comply with the maximum allowable19 TURNOVER times on Table 3 and Table 4.

Table 3. Turnover Times		
Type of Public Swimming Pool	Turnover Maximum	
Diving Pools	2 hours	
Lazy River	2 hours	
Plunge Pools	1 hour	
Runout Slide	1 hour	
Wading Pools	1 hour	

Wave Pools	2 hours
All Other Pools	6 hours

Table 4. Turnover Times for Spa and Therapy Pools			
Temperature	Load	<b>Turnover Maximum</b>	
$\leq$ 72°-93°F	> 2500 gals/person	4 hours or less	
$\leq$ 72°-93°F	>450 gals/person	2 hours or less	
$\leq$ 72°-93°F	$\leq$ 450 gals/person	1 hour or less	
≥93-104 F	All	0.5 hours or less	

(c) The TURNOVER time shall be calculated based on the total volume of water divided
 by the flow rate through the filtration process.

3 (d) For gutter or SKIMMER POOLS with main drains, the required recirculation flow
4 shall be as follows during normal operation:

- 5
- (1) At least 80% of the flow through the POS, and
- 6
- (2) No greater than 20% through the main drain.

7 (e) RECIRCULATION SYSTEM piping shall be designed so that water velocities do not 8 exceed eight feet per second on the discharge side of the recirculation pump and suction piping 9 shall be sized so that the water velocity does not exceed six feet per second unless alternative 10 values have proper engineering justification.

11 (f) Piping shall be of non-toxic material, resistant to corrosion, and able to withstand 12 operating pressures, chemicals, and temperatures. Piping and piping system component 13 materials shall be listed and labeled to NSF/ANSI Standard 14, NSF/ANSI Standard 50, and 14 NSF/ANSI Standard 61, as applicable. All piping shall be clearly marked to indicate type or 15 source of water and direction of flow with clear labeling and/or color coding.

(g) All valves shall be clearly identified with a brass tag, plastic laminate tags, or
permanently affixed alternate.

All recirculation pumps shall meet the minimum Net Positive Suction Head 1 (h) requirement for the system. Pumps shall be of adequate capacity to provide the required number 2 3 of TURNOVERS of PUBLIC SWIMMING POOL water as specified in (b) of this Section and whenever possible shall be so located as to eliminate the need for priming. If the pump or suction is located 4 above the overflow level of the POOL, the pump shall be self-priming. The pump or pumps shall 5 6 be capable of providing flow adequate for the back-washing of filters. Where vacuum filters are 7 used, a vacuum limit switch shall be provided on the pump suction line. The vacuum limit switch 8 shall be set for a maximum vacuum of 18 inches of mercury.

9 (i) The RECIRCULATION SYSTEM shall include a strainer or screen device on the 10 suction side to prevent hair, lint, and foreign objects from reaching the pump and filters. Strainers 11 shall be corrosion-resistant with openings not more than 1/8 inch in size, providing a free-flow 12 area at least four times the area of the pump suction line, and shall be readily accessible and 13 cleaned as necessary to maintain proper skimming. An extra strainer basket shall be provided with 14 each strainer device to permit continuity of service.

(j) A cleaning system shall be provided to remove dirt from the bottom of the POOL.
The cleaning system shall not create an entanglement or suction entrapment hazard or interfere with
the operation or use of the PUBLIC SWIMMING POOL. Use of integral vacuum systems, meaning a
vacuum system that uses the main circulating pump or a dedicated vacuum pump connect to the POOL
with PVC piping and terminating at the POOL with a flush-mounted vacuum port fitting, shall be
prohibited.

(k) A flow meter accurate within +/- 5% of the actual design flow shall be provided
 for each filtration system. Flow meters shall be listed and labeled to NSF/ANSI Standard 50 by an
 ANSI-accredited certification organization. When used with sand filters, the flow meter shall be
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located at a point so that the rate of the backwash will also be indicated. The flow meter shall be
 capable of measuring flows at least twenty percent over the design flow rate and shall be easy to
 read. Mercury manometers must be equipped with return wells to keep mercury from being blown
 out of the manometer.

(1) All components of the filtration and RECIRCULATION SYSTEMS shall be kept in
continuous operation 24 hours per day. The system flow rate shall not be reduced more than 25%
lower than the minimum design requirements and only reduced when the POOL is unoccupied.

8

#### §4612. Inlets and Outlets.

9 (a) Effective distribution of treated water shall be accomplished by either a continuous 10 POS with integral INLETS or by means of directionally adjustable INLETS to facilitate circulation 11 of the water and maintain a disinfectant residual as required by \$4619 uniformly throughout the 12 entire PUBLIC SWIMMING POOL.

(b) INLETS shall be hydraulically sized to provide the design flow rates for each POOL
area of multi-zone POOLS based on the required design TURNOVER RATE for each zone.

15 (c) POOLS shall use wall and/or floor INLETS to provide adequate mixing. Wall INLETS 16 shall be flushed against the POOL wall; submerged at least 24 inches below the water level; spaced 17 no greater than 20 feet apart; placed within five feet of each corner of the POOL; placed at least 18 five feet from a SKIMMER; and placed in each recessed or isolated area of the POOL. INLETS shall 19 not protrude more than one and <sup>1</sup>/<sub>4</sub> inches beyond the wall surface into the POOL and shall be 20 rounded and smooth so as not to produce a SAFETY hazard.

21 (d) For POOLS greater than 50 feet wide, floor INLETS shall be required. Floor INLETS
22 shall be flush with the bottom of the POOL; spaced no greater than 20 feet apart; row of INLETS

located within 15 feet of each side wall; and spaced no greater than 25 feet from the nearest side
 walls when combined with wall INLETS.

3 (e) A minimum of two hydraulically balanced filtration system outlets are required in the bottom of all PUBLIC SWIMMING POOLS. The outlets shall be connected to a single main suction 4 pipe by branch lines piped to provide hydraulic pressure balance between the drains. The branch 5 6 lines shall not be valved so as to be capable of operating independently. Outlets shall be equally spaced from the POOL side walls and shall be located no less than three feet apart, measuring 7 between the centerlines of the suction outlet covers. Suction outlets, including sumps and 8 9 covers, shall be listed and labeled to the requirements of ANSI/APSP-16 2011. The bottom drain and recirculation outlets shall be covered with grates or other protective devices which 10 cannot be removed except with tools. The slots or openings of these covers shall not exceed  $\frac{1}{2}$ 11 inch in the smaller dimension. 12

13

## §4613. Perimeter Overflow Gutters.

(a) PERIMETER OVERFLOW GUTTERS shall extend completely around the PUBLIC
SWIMMING POOL, except at steps or recessed ladders. The overflow gutter may also serve as a
step or a handhold, provided that the gutter is provided with a grating or cover and conforms to
all construction and dimensional requirements herein specified.

(b) PERIMETER OVERFLOW GUTTERS shall be capable of continuously removing at
least 125 percent of the approved total recirculation flow rate chosen by the designer.

20 (c) Gutter water shall be returned to the filter, or to waste, at the discretion of the POOL
21 OPERATOR.

22 (d) All overflow gutters shall be connected to the RECIRCULATION SYSTEM through
 23 a properly designed surge tank. A vacuum gravity filter box may be used as a surge tank. The
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gutter system shall have an effective net surge capacity of at least one gallon per each square foot
of POOL surface area. The surge tank's minimum, maximum, and normal POOL operating water
levels shall be marked on the tank so as to be readily visible for inspection. Surge tanks shall have
overflow pipes to convey excess water to waste via an air gap or other approved BACKFLOW
prevention device.

6 (e) Gutters shall be level with a tolerance of +/- 1/16 of an inch around the perimeter 7 of the PUBLIC SWIMMING POOL. The opening into the gutter beneath the coping shall not be less 8 than four inches wide with a depth of at least three inches. Where large gutters are used, they 9 shall be designed to prevent entrance or entrapment of BATHERS' arms and legs. The overflow 10 edge or lip shall be rounded and not thicker than two and ½ inches. The overflow outlets shall be 11 provided with outlet pipes which shall in any case be at least two inches in diameter.

(f) The outlet fittings shall have a clear opening in the grating of at least equal to one and <sup>1</sup>/<sub>2</sub> times the cross-sectional area of the outlet pipe. The outlet shall be spaced not more than three feet on centers in flat gutters. If the bottom of the gutter slopes is at least 1/3 of an inch per foot from a crown toward the outlet fittings, the outlets may be placed not over fifteen feet on the center. The use of continuous-flow gutters with single or multiple outlets will be acceptable provided they are properly designed for the POOL, self-cleansing, and capable of maintaining an effective skimming action without discharging back into the POOL.

(g) Nothing in this Section shall preclude the use of roll-out gutters or DECK-level type
PUBLIC SWIMMING POOLS. Such designs shall conform to the general provisions relating to
overflow rates. A curb, if used, shall be twelve inches wide and from three inches to six inches
above the DECK. The gutter must be wide enough to provide safe footing.

23 (h) Gutters shall permit ready inspection, cleaning, and repair.

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## §4614. Skimmers.

(a) SKIMMERS are permitted on PUBLIC SWIMMING POOLS which are not more than
thirty feet wide and not more than 1,600 square feet, provided an approved handhold is installed
completely around the POOL. SKIMMERS shall be installed in each corner, or in the coves of a
free-form POOL, and at twenty to forty-foot intervals around the POOL perimeter. Handholds
shall consist of bull-nosed coping not over two and ½ inches thick for the outer two inches or
an equivalent approved handhold. The handholds must be no more than nine inches above the
normal water line.

9 (b) The SKIMMER system shall be designed to handle up to 100% of the total 10 recirculation flow rate chosen by the designer. SKIMMERS shall be so located as to provide 11 effective skimming of the entire water surface and so as not to be affected by restricted flow in 12 areas such as near steps and within small recesses.

(c) There shall be at least one such SKIMMER for each five hundred square feet of
 POOL surface area or fractional part thereof. Additional SKIMMERS may be required to achieve
 effective skimming under site-specific conditions and/or to comply with all applicable building
 codes.

(d) Hybrid systems that incorporate surge weirs in the overflow gutters to provide for
in-POOL surge shall meet all of the requirements specified for overflow gutters (with the exception
of the surge or balance tank, since the surge capacity requirement will be alternately met by the
in-POOL surge capacity). The number of surge weirs shall be based on the individual surge weir
capacity and the operational apportionment of the design recirculation flow rate.

(e) The flow rate for the SKIMMERS shall comply with manufacturer data plates or
NSF/ANSI 50, including Annex K.

1	(f)	Each SKIMMER shall have a weir that adjusts automatically to variations in water		
2	level over a range of at least four inches.			
3	(g)	Each SKIMMER shall be equipped with a trimmer valve capable of distributing the		
4	total flow bet	ween individual SKIMMERS.		
5	(h)	The base of each SKIMMER shall be level with all other SKIMMERS in the POOL		
6	within a toler	ance of $+/- \frac{1}{4}$ of an inch.		
7	(i)	An easily removable and cleanable basket or screen through which all overflow		
8	water must p	ass shall be provided to trap large solids.		
9	(j)	The SKIMMER shall be constructed of sturdy, corrosion-resistant materials.		
10	(k)	There shall be some means of shutting off each SKIMMER.		
11	§4615. Filter Requirements.			
12	(a)	General		
13		(1) Filtration shall be required for all PUBLIC SWIMMING POOLS that recirculate		
14	water			
15		(2) The filter shall be designed, constructed, and operated so that structural or		
16	functional failures will not permit passage of unfiltered water.			
17		(3) All filters shall be listed and labeled to NSF/ANSI 50 by an ANSI-		
18	accredited certification organization.			
19		(4) All filters shall be so designed and installed with adequate clearance and		
20	facilities for ready and safe inspection, maintenance, disassembly, and repair.			
21		(5) Filters should be used with the appropriate filter media as recommended		
22	by the	e filter manufacturer for maximum clarity and cycle length for PUBLIC SWIMMING		
23	POOL	use. A means and access for easy removal of filter media shall be required.		
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- 1
- (b) Granular Media Filters
- 2 (1) The granular media filter system shall have valves and piping to allow
  3 isolation, venting, complete drainage (for maintenance or inspections), and backwashing
  4 of individual filters.
- 5 (2) Filtration accessories shall include with the influent and effluent pressure 6 gauges, backwash sight glass or other means to view backwash water clarity, and-manual 7 air relief system.
- 8 (3) High-rate granular media filters shall be designed to operate at no more than 9 15 gallons per minute per square foot when a minimum bed depth of 15 inches is provided 10 per manufacturer. When a bed depth is less than 15 inches, filters shall be designed to 11 operate at no more than 12 gallons per minute per square foot.
- (4) The granular media filter system shall be designed to backwash each filter
  at a rate of at least 15 gallons per minute per square foot of filter bed surface area, unless
  explicitly prohibited by the filter manufacturer and approved at an alternate rate as
  specified in their NSF/ANSI 50 listing.
- 16 (5) The minimum depth of filter media cannot be less than the depth specified17 by the manufacturer.
- 18 (6) Influent and effluent pressure gauges shall have the capability to measure
  19 up to a 20 pounds per square inch increase in the differential pressure across the filter bed
  20 in increments of one pound per square inch or less.
- (7) If coagulant feed systems are used, they shall be installed with the injection
  point located before the filters as far ahead as possible, with electrical interlocks in
  accordance with §4618 (b).
- 1
- (c) Precoat Filters

2	(1) The design filtration rate for vacuum precoat filters shall not be greater
3	than either two gallons per minute per square foot or two and $\frac{1}{2}$ gallons per minute per
4	square foot when used with a continuous precoat media feed (commonly referred to as
5	"body-feed").
6	(2) The design filtration rate for pressure precoat filters shall not be greater
7	than two gallons per minute per square foot of effective filter surface area.
8	(3) The filtration surface area shall be based on the outside surface area of the
9	media with the manufacturer's recommended thickness of precoat media and consistent
10	with their NSF/ANSI 50 listing and labeling.
11	(4) The pre-coat process shall follow the manufacturer's recommendations and
12	requirements of NSF/ANSI Standard 50.
13	(d) Cartridge Filters
14	(1) The design filtration rate for surface-type cartridge filter shall not exceed
15	0.30 gallons per minute per square foot.
16	(2) Filter cartridges shall be supplied and sized in accordance with the filter
17	manufacturer's recommendation for PUBLIC SWIMMING POOL use.
18	(3) One complete set of spare cartridges shall be maintained on site in a clean
19	and dry condition.
20	§4616. Pool Access and Egress.
21	(a) Each POOL shall have a minimum of two means of access and egress with the
22	exception of WATERSLIDE LANDING POOLS, WATERSLIDE RUNOUTS, and WAVE POOLS.

Acceptable means of access/egress shall include stairs/handrails, grab rails/RECESSED STEPS,
 ladders, ramps, swim outs, and zero-depth entries.

- 3 (b) If the POOL is over thirty feet wide, such means of access/egress shall be installed
  4 on each side of the POOL and shall be placed not more than 75 feet apart.
- 5 (c) Where provided, stairs shall be constructed with slip-resistant materials. The 6 leading horizontal and vertical edges of stair treads shall be outlined with slip-resistant contrasting 7 tile or other permanent marking of not less than one inch and not greater than two inches.
- 8 (d) Where stairs are provided in POOL the water depths greater than five feet, they shall 9 be recessed into the side of the POOL, not protrude into the swimming area, and the lowest tread 10 shall be not less than four feet below normal water elevation.
- (e) Traditional rectangular stairs shall have a minimum uniform horizontal tread depth
  of 12 inches, and a minimum unobstructed tread width of 24 inches.
- (f) Dimensions of stair treads for other types of stairs shall conform to the STANDARDS
  of Table 5, Figure 3, Figure 4, and Figure 5.

Table 5. Required Dimensions for Stairs, Treads, and Risers					
Dimensions	T-1 Standard	T-1 Convex, Concave, Triangular	T-2	W-1	H-1
Minimum	12 inches	21 inches	12 inches	24 inches	6 inches
Maximum	18 inches	24 inches	16 inches	N/A	12 inches



5 (g) The top surface of the uppermost stair tread shall be located not more than 12 inches
6 below the POOL coping or DECK.

(h) Stair risers shall have a minimum uniform height of six inches and a maximum
 height of 12 inches, with a tolerance of ½ of an inch between adjacent risers.

3 (i) Stairs shall not be used underwater to transition between two sections of POOL of4 different depths.

5 PUBLIC SWIMMING POOL ladders shall be corrosion-resistant and shall be anchored (i) 6 securely to the DECK. Ladders shall have two handrails with not less than 17 inches and not more than 24 inches horizontal clear space between them. Ladders and handrails shall be designed 7 to resist a load of 50 pounds per linear foot applied in any direction and independently a 8 9 single concentrated load of 200 pounds applied in any direction at any location. The upper railing surface of handrails shall extend above the POOL coping or DECK a minimum of 28 inches. 10 The clear space between handrails and the POOL wall shall be not less than three inches and not 11 more than six inches. 12

(k) Ladder treads shall be slip-resistant and shall have a minimum horizontal tread depth of 1 and ½ inches. The distance between the horizontal tread and POOL wall shall not be greater than four inches. Ladder treads shall be uniformly spaced not less than seven inches and not more than 12 inches vertically at the handrails. The top surface of the upmost ladder tread shall be located not more than 12 inches below the POOL coping, gutter, or DECK.

18 (l) Stairs wider than five feet shall have at least one additional handrail for every 12
19 feet of stair width.

20

(m) Dimensions of handrails shall conform to the STANDARDS of Table 6 and Figure 6.

Table 6. Stair Handrail Dimensions		
Dimensions	T-1	H-1
Minimum	3 inches	34 inches
Maximum	N/A	38 inches

1

# Figure 6. Stair Handrails



- 2 (n) RECESSED STEPS shall be slip-resistant, easily cleanable, shall drain into the POOL,
- 3 and dimensions shall conform to the STANDARDS of Table 7, Figure 7, and Figure 8.

Table 7. Recessed Steps Dimensions				
Dimensions	H-1	H-2	W-1	D-1
Minimum	6 inches	5 inches	12 inches	5 inches
Maximum	12 inches	N/A	N/A	N/A



Figure 8. Recessed Steps Dimensions



2

#### 3 §4617. Decks and Walkways.

4 (a) A continuous DECK with at least four feet of clearance from the POOL edge to
5 fencing or other obstruction shall be provided to allow for QUALIFIED LIFEGUARD transit,
6 roaming, or change of positioning to maximize viewing of the zone of BATHER surveillance as
7 well as execution of water extrication. All DECK edges shall be beveled, rounded, or otherwise
8 relieved to eliminate sharp corners. The DECK area shall be impervious and easily cleanable.

(b) The surface of the paved walk or DECK shall not drain into the PUBLIC SWIMMING
 POOL, RECIRCULATION SYSTEMS, or the overflow gutter. Drainage shall be conducted away from
 the POOL area in a manner that will not create muddy, hazardous, or objectionable conditions.
 DECKS shall be sloped away from the POOL and in accordance with Table 8.

Table 8. Minimum Slope	s for Drainage
Surface	Minimum Slope
Smooth finishes; such as tile, hand-finished concrete & lightly- broomed concrete	1/8 inch per foot
Moderately textured finishes; such as exposed aggregate or medium- broomed concrete	1/4 inch per foot
Heavily textured finishes; such as brick (where permitted)	3/8 inch per foot

#### 5

### §4618. Chemical Control.

6 (a) DISINFECTION and pH control chemicals shall be automatically introduced through 7 the RECIRCULATION SYSTEM. A chemical controller, as specified in this Section shall be provided 8 and used for monitoring and control of disinfectant and pH feed equipment. DISINFECTION and 9 pH control chemicals shall be added using a feeder that meets the requirements outlined in this 10 Section.

11 (b) The POOL shall be equipped with chemical feed equipment such as flow-through 12 chemical feeders, electrolytic chemical generators, mechanical chemical feeders, chemical feed 13 pumps, and automated controllers that are listed and labeled to NSF ANSI 50 by an ANSI-14 accredited certification organization. Flow-through chemical feeders shall only be used with the 15 chemical (formulation, brand, size, and shape) specified by the chemical feeder manufacturer. All chemical feeders shall be provided with an automatic means to be disabled through an electrical
 interlock with at least two of the following:

3

4

(1) Recirculation pump power,

(2) Flow meter/flow switch in the return line,

5 (3) Chemical control power and paddle wheel or flow cell on the chemical 6 controller if SAFETY test confirms feed systems are disabled through the controller when 7 the pump is turned off, loses prime, or filters are backwashed.

8 (c) Feeders shall be capable of supplying disinfectant and pH control chemicals to the 9 PUBLIC SWIMMING POOL to maintain the minimum required DISINFECTION levels at all times in 10 accordance with these rules and regulations. All CHLORINE dosing and generating equipment, 11 including erosion feeders, or in line electrolytic and brine/batch generators, shall be designed with 12 a capacity to provide 4.0 lbs of FREE AVAILABLE CHLORINE (FAC)/day/10,000 gal of POOL water 13 for outdoor PUBLIC SWIMMING POOLS, or 2.5 lbs FAC/day/10,000 gal of POOL water for INDOOR 14 SWIMMING POOLS at a minimum.

(d) The injection point of DISINFECTION chemicals shall be located below any pH
control chemical injection point with sufficient physical separation of the injection points to reduce
the likelihood of mixing of these chemicals in the piping during periods of interruption of
RECIRCULATION SYSTEM FLOW. Means of injection shall not allow BACKFLOW into the chemical
system from the POOL system. Coagulants shall be metered and injected through a pump system
prior to the filters per the manufacturer's recommended rate.

(e) Automated controllers shall be installed for monitoring and turning on or off
 chemical feeders used for pH and disinfectants at all PUBLIC SWIMMING POOLS. Operation
 manuals or other instructions that give clear directions for cleaning and calibrating automated
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controller probes and sensors shall be provided in close proximity to the automated controller. A
 set point shall be used to target the disinfectant level and the pH level.

- 3 (f) Equipment and piping used to apply chemicals to the water shall be of such size,
  4 design, and material that they may be cleaned and will be free from clogging. All material used
  5 for such equipment and piping shall be resistant to action of chemicals to be used therein.
- 6

# **§4619.** Disinfection and Water Quality.

7 (a) PUBLIC SWIMMING POOLS when in use shall be continuously disinfected by a
8 chemical which imparts a residual effect. Only products that are EPA-registered for use as
9 sanitizers or disinfectants in PUBLIC SWIMMING POOLS shall be permitted.

(b) When CHLORINE is used, PUBLIC SWIMMING POOLS not using cyanuric acid
(CYA), shall maintain a minimum FAC concentration of 1.0 ppm, and POOLS using CYA
shall maintain a minimum FAC concentration of 2.0 ppm. SPAS shall maintain a minimum
FAC concentration of 3.0 ppm. Maximum FAC concentrations shall not exceed 10.0 ppm at
any time the PUBLIC SWIMMING POOL is open to BATHERS.

(c) If used, CYA levels shall not exceed 90 ppm. Use of CYA or stabilized CHLORINE
products shall be prohibited for new construction, SUBSTANTIAL ALTERATION, or DISINFECTION
equipment replacements in SPAS and THERAPY POOLS after the effective date of these rules and
regulations.

(d) Bromine-based disinfectants may be applied to PUBLIC SWIMMING POOLS through
the addition of an organic bromine compound (1,3-Dibromo-5,5-dimethylhydantoin (DBDMH) or
1-bromo-3-chloro-5,5-dimethylhydantoin (BCDMH)). Minimum bromine concentrations of 4.0
ppm shall be maintained at all times in SPAS, and 3.0 ppm shall be maintained at all times in all

other PUBLIC SWIMMING POOLS. The maximum bromine concentration shall not exceed 8.0 ppm
 at any time the PUBLIC SWIMMING POOL is open to BATHERS.

- 3 (e) Use of compressed CHLORINE gas shall be prohibited for new construction and after
  4 SUBSTANTIAL ALTERATION to existing PUBLIC SWIMMING POOLS. For existing facilities using
  5 CHLORINE gas, the following additional features shall be provided:
- 6 (1) The CHLORINE and chlorinating equipment shall be in a separate room with 7 a shatter-proof ventilation system capable of 60 air changes per hour. Such rooms shall 8 not be below ground level and shall be provided with a shatter-proof gas-tight inspection 9 window. The door of the room shall not open to the PUBLIC SWIMMING POOL, and shall 10 open to the exterior of the building or structure.
- 11 (2) The chlorinator equipment shall be of rugged design capable of
  12 withstanding wear without developing leaks.
- 13 (3) CHLORINE cylinders shall be anchored to prevent their falling over. A
  14 valve-stem wrench shall be maintained on the CHLORINE cylinders in use so the supply can
  15 be shut off quickly in the case of an emergency.
- 16 (4) The CHLORINE feeding device shall be designed so that during accidents or 17 interruptions of the water supply, leaking CHLORINE gas will be conducted to the out-of-18 doors.
- 19 (5) The chlorinator shall be a solution feed-type capable of delivering
  20 CHLORINE at its maximum rate without releasing CHLORINE gas to the atmosphere.
- 21 (6) The chlorinators shall be designed to prevent the BACKFLOW of water into
  22 the CHLORINE solution container.

(7)Personal protective equipment, consisting of at least a gas mask designed 1 for use in a CHLORINE atmosphere and of a type approved by the National Institute for 2 3 Occupational Safety and Health (NIOSH) shall be stored directly outside one entrance of the room in which the chlorinator is maintained. In addition, a replacement canister shall 4 be provided and a record shall be kept of gas mask usage to ensure that the mask will be 5 6 serviceable when needed.

(8)A minimum of two self-contained breathing apparatus (SCBA) systems 7 shall be on hand at all times and two QUALIFIED OPERATORS are to be involved in the 8 changing of the tanks. One of the QUALIFIED OPERATORS should be stationed outside of 9 10 the chemical room where the QUALIFIED OPERATOR inside can be seen at all times.

(f) Other sanitizers and disinfectants are acceptable when they are demonstrated to provide a readily measurable residual. Such sanitizers and disinfectants shall not create a hazardous condition or compromise disinfectant efficacy when used with required bromine and

An emergency direct line telephone shall be located by the door.

(9)

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12

13

14

CHLORINE concentrations and not interfere with water quality measures meeting all criteria set 15 forth in these rules and regulations. 16

17 (g) The PUBLIC SWIMMING POOL water shall be maintained in an alkaline condition as indicated by pH of not less than 7.2 and not over 7.8. A pH testing kit accurate to the nearest 18 19 0.2 pH unit shall be provided at each PUBLIC SWIMMING POOL.

20 (h) PUBLIC SWIMMING POOL water shall be chemically balanced. Total alkalinity shall 21 be maintained in the range of 60-180 ppm. Calcium hardness shall not exceed 1,000 ppm. When 22 the level of combined CHLORINE (chloramines) exceeds 0.4 ppm, actions shall be taken by the 23 operator to reduce this level. Such actions shall include but are not limited to superchlorination, 12.27.18

water exchange, or PATRON adherence to appropriate BATHER hygiene practices. EPA-registered
 algaecides may be used provided that the product is labeled as an algaecide for PUBLIC SWIMMING
 POOL use and the product is used in strict compliance with label instructions.

A water quality testing kit for measuring the concentration of the disinfectant 4 (i) residual, pH, alkalinity, CYA (if used), and temperature, certified to NSF/ANSI 50 by an ANSI-5 6 accredited certification organization, shall be provided at each POOL. FAC, combined AVAILABLE 7 CHLORINE (CAC), or total bromine (TB), and pH shall be tested at all PUBLIC SWIMMING POOLS prior to opening each day. For all PUBLIC SWIMMING POOLS using an automated disinfectant feed 8 9 system, FAC (or TB) and pH shall be tested every four hours while open to the public. PUBLIC SWIMMING POOLS using a manual disinfectant feed system that delivers disinfectant via a flow 10 through erosion feeder or metering pump without an automated controller, FAC or bromine and 11 pH shall be tested every two hours while open to the public. Total alkalinity shall be tested weekly. 12 Total dissolved solids shall be tested quarterly. Calcium hardness and SATURATION INDEX shall 13 14 be tested monthly. If used, CYA shall be tested 24 hours after the addition of CYA and monthly thereafter. If PUBLIC SWIMMING POOLS use stabilized CHLORINE as its primary disinfectant, the 15 operator shall test CYA every two weeks. 16

17

(j) The maximum temperature for PUBLIC SWIMMING POOLS shall be 104°F.

(k) The new construction or SUBSTANTIAL ALTERATION of PUBLIC SWIMMING POOLS
designed primarily for children under 5 years old, such as WADING POOLS, and THERAPY POOLS
shall be required to use a SECONDARY DISINFECTION SYSTEM within one year of the effective date
of these rules and regulations:

(1) SECONDARY DISINFECTION SYSTEMS shall be designed to achieve a
 minimum 3-log (99.9%) reduction in the number of infective *Cryptosporidium parvum* OOCYSTS per pass through the SECONDARY DISINFECTION SYSTEM.

4 (2) The SECONDARY DISINFECTION SYSTEM shall be located in the treatment
5 loop (post filtration) and treat a portion (up to 100%) of the filtration flow prior to return
6 of the water to the PUBLIC SWIMMING POOL.

7 (l) Removal of water from the POOL and replacement with make-up water shall be
8 performed as needed to maintain water quality. A volume of water totaling at least four gallons
9 per BATHER per day per PUBLIC SWIMMING POOL shall be discharged from the system or treated
10 with an alternate system approved by the DEPARTMENT and reused.

11

### §4620. Water Clarity.

The water in a PUBLIC SWIMMING POOL shall be sufficiently clear such that the bottom is visible while the water is static. To make this observation, a four-inch by four-inch marker tile in contrasting color to the POOL floor or main suction outlet shall be located at the deepest part of the POOL. For POOLS over 10 feet deep, an eight by eight-inch square marker tile, shall be used as a reference point. Such reference point shall be visible at all times at any point on the DECK up to 30 feet away in a direct line of sight from the tile or main drain.

18

# §4621. Electrical Requirements.

Nothing in these rules and regulations shall be construed as providing relief from any
applicable requirements of the National Electrical Code (NEC) or other applicable code.

21 (a) INDOOR SWIMMING POOLS and CHEMICAL STORAGE SPACES shall be considered
22 wet and corrosive environments.

(b) Electrical conduit, devices or equipment shall not enter, pass through, or occupy an
 interior CHEMICAL STORAGE SPACE, except as required to service devices integral to the function
 of the room, such as pumps, vessels, controls, or lighting and SAFETY devices, if allowed by the
 local electrical code.

5 (c) Lamps, including fluorescent tubes, installed in interior CHEMICAL STORAGE
6 SPACES shall be protected against breakage with a lens or other cover, or be otherwise protected
7 against the accidental release of hot materials.

8

#### §4622. Lighting Requirements.

9 Lighting as described in this Section shall be provided for all outdoor PUBLIC SWIMMING
10 POOLS open for use from 30 minutes before sunset to 30 minutes after sunrise, or during periods
11 of natural illumination below the levels required in this Section.

12 (a) EQUIPMENT ROOMS and INDOOR SWIMMING POOL water surface shall be lighted to
 13 provide a minimum of 30 horizontal foot candles of illumination. Outdoor water surface and
 14 DECK shall have a minimum maintained light level of ten horizontal foot candles of
 15 illumination.

(b) Where outdoor POOLS are open for use for night swimming, or during periods of
low illumination, underwater lighting may be excluded where maintained POOL surface lighting
levels are a minimum of 15 horizontal foot candles, and all portions of the POOL, including the
bottom and drain(s), are readily visible as required in §4620.

(c) Where underwater lighting is used, not less than 0.5 watts shall be employed per
square foot of PUBLIC SWIMMING POOL water surface area. Such lights shall be spaced to provide
illumination so that all portions of the POOL, including the bottom and drain(s), may be seen
readily without glare. Dimmable lighting shall not be used for underwater lighting.

When underwater POOL lighting fixtures are provided, they shall be installed so as 1 (d) not to create a SAFETY hazard to BATHERS. Branch circuits that supply underwater lights operating 2 3 at more than the Low Voltage Contact Limit as defined in NEC 680.2 must be GROUND-FAULT CIRCUIT INTERRUPTER (GFCI) protected. The top of lens of the underwater lighting fixtures 4 should be at least eighteen inches below water level of POOL. Lighting shall be such that 5 6 lifeguards may see every part of the PUBLIC SWIMMING POOL, all diving boards, or other 7 appurtenances, without being blinded by the light. Lights, appliances, and wiring shall be installed and grounded in accordance with the local electrical code. Overhead electrical wiring shall be 8 9 designed and located so that wires cannot possibly fall on the PUBLIC SWIMMING POOL 10 ENCLOSURES.

11

(e) No lighting controls shall be accessible to PATRONS or BATHERS.

(f) Outdoor POOLS, or POOLS with adequate natural light that are intended for
daylight use only, shall prominently post signs which are legible at all entrances and which state
that swimming after dark is not permitted in accordance with these rules and regulations.

15

# §4623. Ventilation Requirements.

All INDOOR SWIMMING POOLS, SHOWER facilities, dressing rooms, toilet spaces, CHEMICAL STORAGE SPACES, and mechanical rooms shall be adequately ventilated either by natural or mechanical means and shall comply with ASHRAE Standard 62.1 2013, *Ventilation for Acceptable Indoor Air Quality*.

20

#### §4624. Theoretical Peak Occupancy.

(a) The THEORETICAL PEAK OCCUPANCY for a PUBLIC SWIMMING POOL shall be used
for designing systems that serve BATHERS and PATRONS, and shall incorporate non-water related

areas such as DECKS and other adjacent portions of the PUBLIC SWIMMING POOL not associated
 with the PUBLIC SWIMMING POOL.

3 (b) The THEORETICAL PEAK OCCUPANCY shall be calculated by dividing the surface area in square feet of the PUBLIC SWIMMING POOL by the density factor (D) that fits the specific 4 PUBLIC SWIMMING POOL being considered. 5 6 THEORETICAL PEAK OCCUPANCY = PUBLIC SWIMMING POOL Surface Area / D The density factors (D) are: 7 Water/BATHER-related: 8 (1)FLAT WATER density factor = 20 sq. ft. per BATHER 9 AGITATED WATER density factor = 15 sq. ft. per BATHER 10 (2)(3) HOT WATER density factor = 10 sq. ft. per BATHER 11 (4) WATERSLIDE LANDING POOL density factor = manufacturer-established 12 capacity at any given time. 13 14 (5) Interactive water play water density factor = 10 sq. ft. per BATHER on surface. 15 SURF POOL density factor = manufacturer-established capacity at any given 16 (6)17 time. Non-water/PATRON-related: 18 19 (7)DECK density factor = 50 sq. ft. per BATHER. 20 (8) Stadium seating density factor = 6.6 sq. ft. per BATHER The density factors in (b) of this Section may be modified for higher BATHER or 21 (c) 22 PATRON density, but they shall not be modified to result in less BATHERS per square foot than 23 listed. 12.27.18 Page 47 of 76

(d) The THEORETICAL PEAK OCCUPANCY shall be determined by adding the 1 calculations for each PUBLIC SWIMMING POOL in the facility 2

3

# §4625. Hygiene Facilities Requirements.

A PUBLIC SWIMMING POOL designed primarily for use by children less than five 4 (a) years of age shall have, at a minimum, a drinking fountain, toilet, SHOWER facilities, 5 HANDWASHING STATION, and DIAPER-CHANGING STATION located no greater than 200 feet 6 walking distance and in clear view from the nearest entry/exit of the PUBLIC SWIMMING POOL. All 7 other PUBLIC SWIMMING POOLS, except those exempted under §4625 (1), shall have a drinking 8 fountain, toilet, SHOWER facilities, and HANDWASHING STATION located no greater than 300 feet 9 walking distance from each PUBLIC SWIMMING POOL. 10

(b) 11 All PUBLIC SWIMMING POOLS allowing use by diaper-aged BATHERS (i.e., children less than five years of age) shall have at least one DIAPER-CHANGING STATION in each male and 12 13 female HYGIENE FACILITY or make available a unisex DIAPER-CHANGING STATION. DIAPER CHANGING UNITS shall conform to the ASTM Standard F2285-04: Consumer Performance 14 15 Standards for Commercial Diaper-Changing Stations or the STANDARDS for diaper-changing 16 surfaces in the most current version of Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care Programs. 17

If a hand wash sink is not available adjacent to the DIAPER-CHANGING STATION, a 18 (c) portable HANDWASHING STATION shall be available adjacent to the station at all times. In addition, 19 a covered, hands-free, plastic-lined trash receptacle or diaper pail shall be located directly adjacent 20 21 to the DIAPER-CHANGING UNIT.

(d) The minimum number of CLEANSING SHOWERS shall be one per gender for PUBLIC 22 SWIMMING POOLS less than 4,000 square feet in collective surface area. An additional CLEANSING 23 12.27.18

SHOWER per gender shall be added for each additional 4,000 square feet of POOL space or portion
 thereof. CLEANSING SHOWERS shall be evenly distributed between genders, as applicable. The
 layout of the SHOWER rooms shall be such that the BATHERS on leaving the dressing room pass
 the toilets and SHOWERS enroute to the PUBLIC SWIMMING POOL.

5 (e) SHOWERS shall be supplied with soap in a soap dispenser, and water at a rate of at
6 least three gallons per minute per SHOWER head.

7 (f) Entryways to private or group CLEANSING SHOWER areas shall be enclosed by a
8 door or curtain made of smooth, easy-to-clean material.

9 (g) A minimum of one RINSE SHOWER shall be provided on the DECK near an entry 10 point to the PUBLIC SWIMMING POOL or arranged to encourage BATHERS to use the RINSE SHOWER 11 prior to entering the POOL. A minimum of four showerheads per 50 feet of beach entry POOLS 12 shall be provided as a RINSE SHOWER. A minimum of one RINSE SHOWER shall be provided at 13 each entrance to a LAZY RIVER and WATERSLIDE queue line.

(h) PUBLIC SWIMMING POOLS with 7,500 square feet of water area or more may be
flexible in the number of SHOWERS they provide based on the THEORETICAL PEAK OCCUPANCY
in §4624 provided the following requirements are met:

17

(1) 25% of the required SHOWERS shall be CLEANSING SHOWERS;

18 (2) 25% of the required SHOWERS shall be RINSE SHOWERS; and

19

(3) the remaining 50% may be either CLEANSING or RINSE SHOWERS.

20 (i) All floors and other surfaces which may be walked on by BATHERS shall have a
21 smooth, easy-to-clean, impervious-to-water, slip-resistant surface. Floors shall be sloped to drain
22 water or other liquids.

1 (j) Walls, partitions, doors, lockers, and similar surfaces which require periodic 2 cleaning shall be of impervious material, smooth, and finished so as to facilitate thorough 3 scrubbing. Interior walls and partitions shall terminate not less than six inches above the floor, 4 or shall rest on masonry or concrete not less than four inches above the floor. Junctures inside 5 the building between all walls or partitions and floors of structures shall be covered.

6 (k) Lockers shall be set either on solid masonry bases four inches high or on legs
7 with bottom of locker at least ten inches above the floor. Lockers shall be properly vented.

8 (1)The requirement relating to dressing rooms and SHOWERS shall be waived, if 9 requested by owner, for POOLS with use limited to the tenants of the specific motel, apartment complex, condominium, or hotel that is served, and whose PATRONS use these facilities in their 10 own quarters before entering the POOL. If toilets in the private quarters or public sections of these 11 establishments are available to all swimmers within a travel distance of three hundred feet from a 12 POOL, and are located not more than two floors above or below the POOL DECK, toilet facilities 13 14 will not have to be provided at the POOL DECK. Drinking fountains will not be required at POOLS for motels, apartment complexes, condominiums or hotels. 15

16 (m) Unless exempted by (l) of this Section, toilet and handwashing facilities shall be 17 provided for the THEORETICAL PEAK OCCUPANCY as computed under §4624 on the basis of the 18 fixture schedule on Table 9.

Table 9. Minimum Required Plumbing Fixtures		
Hygiene Facility	Males	Females
Toilets	1/75	1/40
Urinals	1/75	
Handwashing Sinks 1/100 1/100		1/100
Fixture schedules may be increased in public swimming pools at school, camps, or similar		
locations where bather loads may reach peaks due to schedules of use.		

(n) HYGIENE FACILITY floors, walls, and ceilings shall be kept clean and free of visible
 mold and mildew at all times.

3 (o) HYGIENE FACILITY fixtures, dressing area fixtures, and furniture shall be cleaned
4 and SANITIZED daily, and more often if necessary, with an EPA-registered product.

5 (p) HYGIENE FACILITY fixtures shall be maintained in good repair. Toilet tissue shall 6 be provided in toilet rooms and soap and paper towels shall be provided at each handwashing sink. 7 A minimum of one hands-free trash receptacle shall be provided in areas adjacent to handwashing 8 sinks.

9

(q) FOOT BATHS shall be prohibited.

#### 10 §4626. Bathing Suits, Caps, and Towels.

11 Reusable bathing suits, caps, and towels furnished to PUBLIC SWIMMING POOL users by 12 the management shall be laundered and/or cleaned, and SANITIZED after each usage. Adequate 13 STORAGE shall be provided for storing clean suits, towels, and other shared equipment, and shall 14 be separate from used or unclean materials.

15

### §4627. Barriers and Enclosures.

(a) All PUBLIC SWIMMING POOLS, CHEMICAL STORAGE SPACES, and mechanical
spaces shall be enclosed to prevent unauthorized entry. The ENCLOSURE may consist of any
combination of building envelopes, site walls, or fencing and shall not be less than six feet in
height measured from the finished grade to the top of the BARRIER on the side outside of the
BARRIER surrounding the PUBLIC SWIMMING POOL. Chain-link fencing constructed of a maximum
opening of 1 <sup>3</sup>/<sub>4</sub> inches mesh shall be permitted.

(b) All primary public access gates or doors serving as part of a PUBLIC SWIMMING
 POOL ENCLOSURE or required PUBLIC SWIMMING POOL ENCLOSURE shall be self-closing and self 12.27.18 Page 51 of 76

latching from any open position. All gates or doors shall be capable of being locked from the
exterior and shall be at least equal in height at top and bottom to the BARRIER of which they are a
component. Turnstiles shall not form a part of a PUBLIC SWIMMING POOL ENCLOSURE. For
unguarded PUBLIC SWIMMING POOLS, self-latching mechanisms must be located not less than four
and a half feet above finished grade.

6

#### §4628. Visitor and Spectator Areas.

7 (a) When a spectator area or an access to a spectator area is located within the PUBLIC
8 SWIMMING POOL ENCLOSURE, the DECK adjacent to the area or access shall provide egress width
9 for the spectators in addition to the width required by §4617. The additional width shall be based
10 on the egress requirements in the applicable building code based on the THEORETICAL PEAK
11 OCCUPANCY of the PUBLIC SWIMMING POOL served with a minimum width of four feet.

12 (b) A BARRIER located on the DECK to separate the DECK used by spectators from the 13 PERIMETER DECK used by BATHERS may have one or more openings directly into the BATHER 14 areas with a demarcation line on the DECK that shows the separation between the DECK used by 15 spectators and the PERIMETER DECK used by BATHERS.

(c) A spectator or other area located in a balcony within ten feet of or overhanging any
 portion of a PUBLIC SWIMMING POOL shall be designed to deter jumping or diving into the PUBLIC
 SWIMMING POOL.

(d) No food or drink shall be permitted in the immediate area of the PUBLIC
SWIMMING POOL or on the DECKS surrounding the POOL except that food and beverage will be
allowed in the visitor and spectator area, or in a similarly separated snack area for BATHERS, if
beverages are served in non-breakable containers and trash containers are provided to keep litter
off of the POOL DECKS.

1

### §4629. Cleaning and Maintenance.

2 (a) The PUBLIC SWIMMING POOL wall, floor, walkway, and DECK floor shall be kept
3 clean and free from accumulation of algae, mold, mildew, and/or slime.

4 (b) Floating scum, sputum, and debris in the PUBLIC SWIMMING POOL shall be removed
5 within twenty-four hours or more frequently as required. Visible dirt on the bottom of a PUBLIC
6 SWIMMING POOL shall be removed at least once each day.

7 (c) All parts of the POOL shall be maintained in good repair. Floors shall be kept
8 free from cracks and other defects, and shall conform with §4607. Walls, ceilings, and equipment
9 shall be painted as often as necessary to be kept in good condition.

(d) The whole POOL area shall be kept clean and sanitary, free of litter, and pests.
Hoses shall be maintained for regular flushing and cleaning. During extended periods of non-use
when the recirculation and purification is not functioning, POOLS shall be maintained so as to
prevent their becoming a mosquito breeding source. This shall be accomplished by securely
covering, draining the POOL of all water, and keeping the POOL free of standing water; or by some
other means as approved by the DEPARTMENT.

16 §463

#### §4630. Wading Pool.

In addition to the general PUBLIC SWIMMING POOL requirements stated in these rules and regulations, WADING POOLS shall be separated from other POOLS by a BARRIER that meets the requirements of §4627, unless the WADING POOL is separated by a distance of 15 feet from other bodies of water. WADING POOLS near other WADING POOLS shall not be required to be separated by a BARRIER.

22 **§4631. Spas.** 

In addition to the general PUBLIC SWIMMING POOL requirements stated in these rules and
 regulations, SPAS shall comply with the following provisions:

3 (a) The maximum water depth in SPAS shall be four feet measured from the designed
4 static water line except for SPAS that are designed for special use and purposes and approved by
5 the DEPARTMENT.

6 (b) The maximum submerged depth of any seat or sitting bench shall be 28 inches7 measured from the water line.

8 (c) A SPA shall have one or more suitable, slip-resistant handhold(s) around the
9 perimeter and not over 12 inches above the water line.

(d) Interior steps or stairs shall be provided where SPA depths are greater than 24
inches. Each set of steps shall be provided with at least one handrail to serve all treads and risers.
(e) Elevated SPAS may be located adjacent to another PUBLIC SWIMMING POOL as long
as there is an effective BARRIER between the SPA and the adjacent PUBLIC SWIMMING POOL, or a
minimum distance of four feet between the PUBLIC SWIMMING POOL and SPA is provided.

15 (f) A minimum of two depth markers shall be provided regardless of the shape or size16 of the SPA.

17 (g) Water temperatures shall not exceed  $104^{\circ}$ F.

18 (h) The agitation system shall be connected to a minute timer that does not exceed 1519 minutes that shall be located out of reach of a BATHER in the SPA.

(i) All SPAS shall have a clearly labeled emergency shutoff or control switch for the
purpose of stopping the motor(s) that provide power to the RECIRCULATION SYSTEM and
hydrotherapy or agitation system that shall be installed and be readily accessible to the BATHERS,
in accordance with the NEC.

1	(j)	SPAS shall have a minimum of two adjustable filter system INLETS spaced at least
2	three feet apar	t and designed to distribute flow evenly.
3	§4632.	. Water Slides.
4	(a)	The design engineer shall address compliance with the following STANDARDS and
5	must provide	documentation and/or certification that the WATERSLIDE design is in conformance
6	with these STA	ANDARDS:
7		(1) ASTM F2376-13: Standard Practice for Classification, Design,
8	Manuf	acture, Construction, and Operation of Water Slide Systems; and
9		(2) ASTM F2469-09: Standard Practice for Manufacturer, Construction,
10	Opera	tion, and Maintenance of Aquatic Play Equipment.
11	(b)	Signs indicating riding instructions, warnings, and requirements in accordance with
12	the manufactu	rer recommendations shall be posted at the WATERSLIDE entry.
13	(c)	FLUME surfaces shall be inert, nontoxic, smooth, and easily cleaned. All FLUME
14	valleys and di	ps shall have proper drainage, SAFETY measures that insure a rider cannot fall from
15	the FLUME, ar	and a means of egress in the event the ride malfunctions or a rider stops on the ride.
16	The exit of any	y FLUME must be designed to ensure that BATHERS enter the LANDING POOL or SLIDE
17	RUNOUT at a s	safe speed and angle of entry. If a WATERSLIDE has two or more FLUMES and there
18	is a point of i	ntersection between the centerlines of any two FLUMES, the distance between that
19	point and the	e point of exit for each intersecting FLUME must not be less than the SLIDE
20	manufacturer'	s recommendations and ASTM F2376.
21	(d)	WATERSLIDES shall be designed to terminate at or below water level, except for
22	DROP SLIDES	or unless otherwise permitted by the WATERSLIDE manufacturer and ASTM F2376.
23	WATERSLIDES	s shall be perpendicular to the wall of the PUBLIC SWIMMING POOL at the point of

exit unless otherwise permitted by the WATERSLIDE manufacturer. WATERSLIDES shall be
 designed with an exit system which shall be in accordance with the WATERSLIDE manufacturer's
 recommendations and ASTM F2376, and provides for safe entry into the LANDING POOL or
 WATERSLIDE RUNOUT.

(e) If steps are provided instead of exit ladders or RECESSED STEPS with grab rails, they
shall be installed at the opposite end of the LANDING POOL from the FLUME exit and a handrail
shall be provided.

8 (f) If the WATERSLIDE FLUME ends in a PUBLIC SWIMMING POOL, the landing area 9 shall be divided from the rest of the PUBLIC SWIMMING POOL by a float line, wing wall, peninsula, 10 or other similar feature to prevent collisions with other BATHERS.

(g) A PERIMETER DECK shall be provided along the exit side of the LANDING POOL. In
addition, a walkway, steps, stairway or ramp shall be provided between the LANDING POOL and
the top of the FLUME.

(h) There shall be a SLIDE landing area in accordance with the SLIDE manufacturer's
recommendations and ASTM F2376. This area shall not infringe on the landing area for any other
SLIDES, diving equipment, or any other minimum PUBLIC SWIMMING POOL clearance
requirements. The minimum required water depth shall be in accordance with the SLIDE
manufacturer's recommendations and ASTM F2376.

(i) The landing area of the SLIDE shall be protected through the use of a float line, wingwall, peninsula. or other similar impediment to prevent collisions with other BATHERS.

21 **§4633.** Lazy Rivers.

In addition to the general PUBLIC SWIMMING POOL requirements stated in these rules and
 regulations, LAZY RIVERS shall comply with the following additional provisions:

(a) Handrails, steps, stairs, and propulsion jets for LAZY RIVERS shall not protrude into
 the river.

3 (b) Means of access/egress shall be provided at 150-foot intervals around the LAZY
4 RIVER.

5 (c) A DECK shall be provided along the entire length of the LAZY RIVER.

6 (d) Obstructions around the perimeter of the LAZY RIVER, such as bridges or 7 landscaping, shall be allowed provided they do not impact lifeguarding, sight lines, or rescue 8 operations. All bridges spanning a LAZY RIVER shall have a minimum clearance of both seven 9 feet from the bottom of the LAZY RIVER and four feet above the water surface to any structure 10 overhead.

11

#### §4634. Qualified Operator.

(a) Every PUBLIC SWIMMING POOL shall be under the supervision of a QUALIFIED
OPERATOR who shall assume the responsibility for compliance with all parts of these rules and
regulations relating to POOL operation and maintenance and SAFETY of BATHERS. A QUALIFIED
OPERATOR shall have completed an operator training course that is recognized by the
DEPARTMENT. Originals or copies of such course certificate or documentation shall be available
on site for inspection by the health officer for each QUALIFIED OPERATOR employed at or
contracted by the site.

(b) A QUALIFIED OPERATOR shall be on-site or immediately available within two hours
during all hours of operation at a PUBLIC SWIMMING POOL that:

21

(1) Has more than two PUBLIC SWIMMING POOLS;

22 (2) Has over 50,000 gallons of water;

- 23 (3) Include features with recirculated water;
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1	(4) Is used as a THERAPY POOL or to provide swimming training;
2	(5) Allows BATHER count of greater than 200 BATHERS daily;
3	(6) Is operated by a municipality or a school; or
4	(7) Has a history of repeated violations of these rules and regulations which in
5	the opinion of the health officer requires one or more on-site QUALIFIED OPERATORS.
6	(c) All other PUBLIC SWIMMING POOLS shall have an on-site QUALIFIED OPERATOR
7	immediately available within two hours or a contract with a QUALIFIED OPERATOR for a minimum
8	of weekly visits and assistance whenever needed.
9	(d) A QUALIFIED OPERATOR shall keep operation, SAFETY, emergency, and training
10	plans on file at the facility. In addition, records pertaining to the operation, maintenance and
11	management of the PUBLIC SWIMMING POOL, such as chemical inventory log, water monitoring
12	and testing records, and other records required in these rules and regulations shall be maintained.
13	Such records shall be kept for a minimum of three years and shall be available upon request by the
14	health officer.
15	(e) The QUALIFIED OPERATOR shall ensure that a daily preventive maintenance
16	inspection for PUBLIC SWIMMING POOLS listed in (b) of this Section is done before opening and
17	that it shall include the following:
18	(1) Walkways/DECK and exits are clear, clean, free of debris;
19	(2) Drain covers, vacuum fitting covers, SKIMMER equalizer covers, and any
20	other suction outlet covers are in place, secure, and unbroken;
21	(3) SKIMMER baskets, weirs, lids, flow adjusters, and suction outlets are free of
22	any blockage;

1	(4)	INLET and return covers and any other fittings are in place, secure, and
2	unbroken;	
3	(5)	SAFETY warning signs and other signage are in place and in good repair;
4	(6)	SAFETY equipment as required by these rules and regulations are in place
5	and in good re	epair, including emergency instructions and phone numbers;
6	(7)	Entrapment prevention systems are operational;
7	(8)	Recirculation, DISINFECTION systems, controller(s), and probes are
8	operating as r	equired;
9	(9)	SECONDARY DISINFECTION SYSTEMS are operating as required;
10	(10)	Underwater lights and other lighting are intact with no exposed wires or
11	water in light	s;
12	(11)	Slime and biofilm have been removed from accessible surfaces of PUBLIC
13	SWIMMING PO	DOL SLIDES, and other features;
14	(12)	Doors to non-public areas (CHEMICAL STORAGE SPACES, offices, etc.) are
15	locked;	
16	(13)	First aid supplies are stocked;
17	(14)	Emergency communication equipment and systems are operational;
18	(15)	Fecal/vomit/blood incident contamination response protocols, materials,
19	and equipmer	nt are available;
20	(16)	Water features and amenities are functioning in accordance with the
21	manufacturer	's recommendations;

- (17) Fencing/BARRIERS, gates, and self-latching or other locks are tested and are
   intact and functioning properly, and BARRIERS do not have nearby furniture to encourage
   climbing;
- 4 (18) Drinking fountains are clean and in functional condition;
- 5 (19) Electrical devices are in good working condition and meet the requirements
  6 specified in the NEC and these rules and regulations;
  - (20) Alarms, if required, are tested and functioning properly; and
- 8 (21) Assessing water clarity such that the bottom and objects in the POOL are
  9 clearly visible.
- 10

7

# §4635. Safety Requirements.

PUBLIC SWIMMING POOLS operated primarily for unorganized use and having an 11 (a) area of more than two thousand two hundred fifty square feet of water surface area, shall be 12 provided with an elevated lifeguard platform or chair. In POOLS with four thousand square feet or 13 14 more of water surface area, additional elevated chairs or stations located so as to provide a clear unobstructed view of the POOL bottom in the area under surveillance shall be provided. (Ideally, 15 chairs should be placed in locations which eliminate sun glare on the water, and in positions which 16 will give complete coverage of the POOL within a field view limited to  $45^{\circ}$  on either side of a line 17 of sight extending straight out from the chair.) 18

- (b) Enough acoustical treatment, including material and ceiling design, shall be given
  to enclosed POOL rooms to control noise levels. It is essential for SAFETY that swimmers be able
  to hear signals and directions of routine supervision as well as emergency control.
- 22

When the POOL is not open for use, access to the POOL shall be prevented.

(c)

1 (d) At all POOLS, diagrammatic illustrations of artificial respiration procedures shall 2 be posted where clearly visible from the nearby DECK and shall be protected against the elements. 3 Also, the location and telephone number of the nearest ambulance, hospital, fire, or police 4 rescue service, physician, and POOL operator shall be kept similarly posted together with 5 instructions that in case of need, manual or mouth-to-mouth artificial respiration should be started 6 immediately and continued until a physician arrives or mechanical resuscitators are applied.

7 (e) Whenever the POOL is opened for use and no lifeguard service is provided, the 8 warning sign shall be placed in plain view and shall state "Warning -- No Lifeguard on Duty" 9 with clearly visible letters at least four inches high. In addition, the sign shall also state "Children 10 under the age of 14 should not use POOL without direct adult supervision."

(f) The PUBLIC SWIMMING POOL, as necessary, shall have a functional telephone or 11 other communication system or device that is hard wired and capable of directly dialing 911 or 12 function as the emergency notification system. The telephone or communication system or device 13 14 shall be conspicuously provided and accessible to PUBLIC SWIMMING POOL users such that it can be reached immediately. Alternate functional systems, devices, or communication processes are 15 allowed with the DEPARTMENT's approval in situations when a hardwired telephone is not 16 17 logistically sound, and an alternate means of communication is available. A permanent sign providing emergency dialing directions and the PUBLIC SWIMMING POOL address shall be posted 18 19 and maintained at the emergency telephone, system or device.

20

#### §4636. Lifesaving Equipment, First-Aid Kit.

(a) PUBLIC SWIMMING POOLS whose depth exceeds two feet of standing water shall
provide and maintain a U.S. Coast Guard-approved PUBLIC SWIMMING POOL rescue throwing
device, with at least a quarter-inch thick rope whose length is 50 feet or 1 and <sup>1</sup>/<sub>2</sub> times the width
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of the POOL, whichever is less. The rescue throwing device shall be located in the immediate
 vicinity to the PUBLIC SWIMMING POOL and be accessible to BATHERS.

3 (b) PUBLIC SWIMMING POOLS whose depth exceeds two feet of standing water shall 4 provide and maintain a reaching pole of 12-foot to 16-foot in length, non-telescopic, light in 5 weight, and with a securely attached Shepherd's Crook with an aperture of at least 18 inches. The 6 reaching pole shall be located in the immediate vicinity to the PUBLIC SWIMMING POOL and be 7 accessible to BATHERS and PATRONS.

8 (c) When any POOL is of such size that unaided swimming rescues by lifeguards may 9 not offer sufficient protection to swimmers, one or more square-sterned boats equipped with oars, 10 oarlocks, life rings, or paddle boards shall be provided.

(d) Every PUBLIC SWIMMING POOL shall be equipped with a STANDARD first-aid kit
which shall be kept filled and ready for use. Signage shall be provided at the PUBLIC
SWIMMING POOL which clearly identifies first aid location(s). Availability of a kit in the
office of the resident manager for a motel, apartment complex, condominium, or hotel shall satisfy
this requirement for such POOLS.

16 (e) Lifesaving equipment shall be mounted in conspicuous areas around the PUBLIC 17 SWIMMING POOL DECK, at lifeguard chairs, or elsewhere, readily accessible, its function plainly 18 marked, and kept in repair and ready condition. BATHERS or other PERSONS shall not be permitted 19 to tamper with or remove such equipment from its established location for any purpose other than 20 the intended emergency use.

21

## §4637. Qualified Lifeguards.

(a) One or more QUALIFIED LIFEGUARDS shall be on duty at POOL side at all times
 when the PUBLIC SWIMMING POOL is open to use by BATHERS except at POOLS with less than
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2,250 square feet of water surface. Such attendant should be in full charge of bathing and have 1 authority to enforce all rules of SAFETY and sanitation. 2 3 (b) A QUALIFIED LIFEGUARD shall: Be a capable swimmer and be competent in lifesaving methods; (1)4 Be trained in administration of artificial respiration and other first-aid 5 (2)6 measures; 7 (3) Have satisfactorily completed a lifeguard training course recognized by the DEPARTMENT. The valid and current certificate of completion of the course of instruction 8 9 shall be available for verification; 10 (4) Be dressed suitably to enter the water and to take action on an emergency; 11 and (5) Not engaged in activities which would distract his attention from proper 12 supervision of BATHERS using the PUBLIC SWIMMING POOL or prevent immediate attention 13 14 to a BATHER in distress in the water. Each QUALIFIED LIFEGUARD conducting PATRON surveillance with the 15 (c) responsibility of in-water rescue in less than three feet of water shall have a rescue tube 16 17 immediately available for use. Each QUALIFIED LIFEGUARD conducting PATRON surveillance in a water depth of three feet or greater shall have a rescue tube on his/her PERSON in a rescue ready 18 19 position. 20 (d) PUBLIC SWIMMING POOLS with standing water and with any of the following conditions shall be required to have a lifeguard(s) conducting PATRON surveillance at all times the 21 22 PUBLIC SWIMMING POOL is open. 23 (1)Any PUBLIC SWIMMING POOL deeper than five feet at any point; 12.27.18 Page 63 of 76

- (2) Any PUBLIC SWIMMING POOL that allows for unsupervised children under
   the age of 14 years;
- 3 (3) Any PUBLIC SWIMMING POOL while it is being used for the recreation of
  4 youth groups, including but not limited to childcare usage or school groups;
- 5 (4) Any PUBLIC SWIMMING POOL while it is being used for group training must 6 have a dedicated lifeguard on DECK for class surveillance, including but not limited to 7 competitive swimming and/or sports, lifeguard training, exercise programs, and swimming 8 lessons;
- 9 (5) Any PUBLIC SWIMMING POOL with a configuration in which any point on
  10 the PUBLIC SWIMMING POOL surface exceeds 30 feet from the nearest DECK;
- (6) Any PUBLIC SWIMMING POOL with an induced current or wave action
   including but not limited to WAVE POOLS and LAZY RIVERS;
- 13
- (7) WATERSLIDE LANDING POOLS; and
- 14 (8) Any PUBLIC SWIMMING POOL in which BATHERS enter the water from any
  15 height above the DECK including but not limited to diving boards, DROP SLIDES, starting
  16 platforms, and/or climbing walls. This does not include POOL SLIDES.

(e) When QUALIFIED LIFEGUARDS are used, the facility shall create and implement a
staffing plan which includes diagrammed zones of PATRON surveillance for each PUBLIC
SWIMMING POOL such that:

20

21

- (1) The QUALIFIED LIFEGUARD is capable of viewing the entire area of the assigned zone of PATRON surveillance;
- 22 (2) The QUALIFIED LIFEGUARD is able to reach the furthest extent of the
  23 assigned zone of PATRON surveillance within 20 seconds;
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1	(3) Identify whether the QUALIFIED LIFEGUARD is in an elevated stand,
2	walking, in-water and/or other approved position;
3	(4) Identifying any additional responsibilities for each zone; and
4	(5) All areas of each PUBLIC SWIMMING POOL are assigned a zone of PATRON
5	surveillance and all zones of PATRON surveillance are staffed during operation.
6	(f) Employees who are ill with diarrhea shall not be permitted to enter the water or
7	perform in a QUALIFIED LIFEGUARD role. Employees with open wounds shall be permitted in the
8	water or in a QUALIFIED LIFEGUARD role only if they have healthcare provider approval or wear a
9	waterproof, occlusive bandage to cover the wound.
10	§4638. Supervision of Bathers.
11	(a) POOL staff should encourage the following personal conduct regulations:
12	(1) All BATHERS shall be instructed to use the toilet, and particularly to urinate,
13	before taking a cleansing bath and entering the POOL;
14	(2) All PERSONS using the PUBLIC SWIMMING POOL shall take a CLEANSING
15	SHOWER bath in the nude, using warm water and soap and thoroughly rinsing off all suds,
16	before entering the PUBLIC SWIMMING POOL room or ENCLOSURE. A BATHER leaving
17	the POOL to use the toilet shall take another cleansing bath before returning to the PUBLIC
18	SWIMMING POOL room or ENCLOSURE;
19	(3) Any PERSON having an infectious or communicable disease shall be
20	excluded from a PUBLIC SWIMMING POOL. PERSONS having any considerable area of
21	exposed sub-epidermal tissue, open blisters, cuts, etc., shall be warned that these are likely
22	to become infected and advised not to use the POOL;

- (4) Spitting, spouting of water, blowing the nose, etc., in the PUBLIC
   SWIMMING POOL shall be strictly prohibited; and
- 3

4

5

(5) No running, boisterous or rough play, except supervised water sports, shall be permitted in the POOL, on the runways, DECK, diving boards, floats, platforms, or in dressing rooms, SHOWER rooms, etc.

6 (b) Signage shall be placed in a conspicuous place at the entrance of the PUBLIC
7 SWIMMING POOL communicating expected and prohibited behaviors listed under (a) of this Section
8 using text that complies with the intent of the said information.

9

# §4639. Injury and Illness Incident Reporting.

A full report of any injury or illness incident occurring at a PUBLIC SWIMMING POOL shall be reported by the POOL owner/operator to the DEPARTMENT within 24 hours of its occurrence, and a notation recorded in a log book. This shall include all incidents occurring at a PUBLIC SWIMMING POOL which:

14 (a) result in death;

15 (b) require resuscitation;

16 (c) require referral to a hospital or other facility for medical attention; or

17 (d) is a BATHER illness associated with bathing water quality.

18

# §4640. Water Contamination Response.

(a) In the event of a fecal or vomit contamination in a PUBLIC SWIMMING POOL, the
 QUALIFIED OPERATOR shall immediately close the PUBLIC SWIMMING POOL to BATHERS until

- 21 remediation procedures are complete. This closure shall include the affected PUBLIC SWIMMING
- 22 POOL and other PUBLIC SWIMMING POOLS that share the same RECIRCULATION SYSTEM.

Contaminating material shall be removed (e.g., using a net, scoop, or bucket) and 1 (b) disposed of in a sanitary manner. Fecal or vomit contamination of the item used to remove the 2 3 contamination (e.g., the net or bucket) shall be removed by thorough cleaning followed by DISINFECTION (e.g., after cleaning, leave the net, scoop, or bucket immersed in the POOL during 4 5 the DISINFECTION procedure prescribed for formed-stool, diarrheal-stool, or vomit contamination, 6 as appropriate). PUBLIC SWIMMING POOL vacuum cleaners shall not be used for removal of contamination from the water or adjacent surfaces unless vacuum waste is discharged to a sanitary 7 sewer and the vacuum equipment can be adequately disinfected. 8 9 (c) PUBLIC SWIMMING POOL water that has been contaminated by feces or vomit shall be treated as follows: 10 1) Check to ensure that the water's pH is 7.5 or lower and adjust if necessary; 11 2) Verify and maintain water temperature at 77°F or higher; 12 3) Operate the filtration/RECIRCULATION SYSTEM while the POOL reaches and 13 14 maintains the proper free CHLORINE concentration during the remediation process; 4) Test the CHLORINE residual at multiple sampling points to ensure the proper 15 free CHLORINE concentration is achieved throughout the POOL for the entire 16 17 DISINFECTION time; and 5) Use only non-stabilized CHLORINE products to raise the free CHLORINE 18 levels during the remediation. 19 20 (d) Formed-stool contaminated water shall have the FREE CHLORINE RESIDUAL checked and the FREE CHLORINE RESIDUAL raised to 2.0 mg/L (if less than 2.0 mg/L) and 21 22 maintained for at least 25 minutes (or an equivalent time and concentration to reach the CT VALUE) 23 before reopening the PUBLIC SWIMMING POOL. 12.27.18 Page 67 of 76
1

(e) Diarrheal-stool contaminated water shall:

2	1)	Check	the FREE CHLORINE RESIDUAL and then raise the FREE CHLORINE		
3	RESIDUAL to 20.0 mg/L and maintain for at least 12.75 hours (or an equivalent time and				
4	concentrat	ion to reac	h the CT VALUE) before reopening the PUBLIC SWIMMING POOL, or		
5	2)	Circu	late the water through a SECONDARY DISINFECTION SYSTEM to		
6	theoretically reduce the number of Cryptosporidium OOCYSTS in the PUBLIC SWIMMING				
7	POOL below one OOCYST/100 mL.				
8	(f) In	PUBLIC SV	VIMMING POOL water that contains CYA or a stabilized CHLORINE		
9	product, water shall be treated by:				
10	(1)	Нуре	rchlorination accomplished by:		
11		(i)	Following the preparatory guidance outlined in (c) of this Section;		
12		(ii)	Lowering the CYA concentration to less than or equal to 15 ppm by		
13	dra	uning, if n	ecessary;		
14		(iii)	Raising the FREE CHLORINE RESIDUAL to 20 mg/L for at least 28		
15	ho	urs; 30 mg	/L for at least 18 hours; 40 mg/L for at least 8.5 hours; or an equivalent		
16	tim	ne and con	centration needed to reach the CT INACTIVATION VALUE;		
17		(iv)	Measurement of the inactivation time required shall start when the		
18	PU	BLIC SWIM	IMING POOL reaches the intended FREE CHLORINE RESIDUAL level or;		
19	(2)	Circu	lating the water through a SECONDARY DISINFECTION SYSTEM to		
20	theoretical	ly reduce	the number of Cryptosporidium OOCYSTS in the PUBLIC SWIMMING		
21	POOL belo	w one OO	CYST/100 mL; or		
22	(3)	Drain	ing the PUBLIC SWIMMING POOL completely.		

Vomit-contaminated water shall have the FREE CHLORINE RESIDUAL checked and 1 (g) the FREE CHLORINE RESIDUAL raised to 2.0 mg/L (if less than 2.0 mg/L) and maintained for at 2 3 least 25 minutes (or an equivalent time and concentration to reach the CT VALUE) before reopening the PUBLIC SWIMMING POOL. 4

In PUBLIC SWIMMING POOL water that contains CYA or a stabilized CHLORINE 5 (h) 6 product, water shall be treated by doubling the inactivation time required in these rules and regulations. Measurement of the inactivation time required shall start when the PUBLIC SWIMMING 7 POOL reaches the intended free CHLORINE level. 8

9 (i) If a bodily fluid, such as feces, vomit, or blood, has contaminated a surface in a PUBLIC SWIMMING POOL, facility staff shall limit access to the affected area until remediation 10 procedures have been completed. All visible CONTAMINANT shall be removed and the 11 contaminated surface cleaned and disinfected. 12

13

## §4641. Inspection and Grading.

14 (a) Access.

An employee or representative of the DEPARTMENT shall, after proper presentation of 15 credentials, have access to any PUBLIC SWIMMING POOL at any reasonable time for the purpose of 16 17 making inspections to determine compliance with these rules and regulations. Denial of access shall be cause for suspension of the Sanitary Permit. 18

19

(b) Report of Inspections.

Whenever an inspection of a PUBLIC SWIMMING POOL is conducted, the findings shall be 20 recorded on a form authorized by the DIRECTOR, shall summarize the requirements of these rules 21 22 and regulations, and shall set forth a demerit value for each requirement. Demerit value 23 assignments shall be from one through six. Inspection remarks shall be written to reference, by 12.27.18

1	section number, the section violated, and shall state the correction to be made. The rating score of				
2	the establishment shall be the total of the demerit values for all violations. A copy of the completed				
3	inspection report form shall be issued to the operator of the establishment at the conclusion of the				
4	inspection. The completed form is a public document that shall be made available for public				
5	disclosure to any person who requests it according to law.				
6	(c) Appeal.				
7	The report of inspection of a PUBLIC SWIMMING POOL shall state that an opportunity for				
8	appeal from any notice or inspection findings will be provided if a written request for a hearing is				
9	filed with the DIRECTOR within the period of time established in the notice for correction.				
10	(d) Grading.				
11	(1) Grades of a PUBLIC SWIMMING POOL shall be as follows:				
12	(i) Grade A: An establishment having a demerit score of not more than				
13	ten;				
14	(ii) Grade B: An establishment having a demerit score of more than ten				
15	but not more than twenty;				
16	(iii) Grade C: An establishment having a demerit score of more than				
17	twenty but not more than forty; and				
18	(iv) Grade D: An establishment having a demerit score of more than				
19	forty.				
20	(2) The DEPARTMENT shall issue a placard reflecting the letter grade of the most				
21	recent inspection.				
22	(3) The DEPARTMENT shall establish a specific and reasonable period of time for				
23	correction of the violations found, in accordance with the following provision:				
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(i) When the demerit score of the establishment is twenty or less, all 1 violations of one through five demerits must be corrected within a period of time 2 not to exceed 30 days; or 3 When the demerit score of the establishment is more than twenty but 4 (ii) less than forty-one, all items of one through five demerit points must be corrected 5 6 within a period of time not to exceed 15 days; or When one or more six demerit point items are in violation, (iii) 7 regardless of demerit score, such items must be corrected within a period of time 8 9 not to exceed 10 days; and When the demerit score of the establishment is more than forty, the 10 (iv) Sanitary Permit shall be immediately suspended. 11 (4) The operator shall at the time of inspection correct a violation of a CRITICAL 12 ITEM of these rules and regulations. Considering the nature of the potential hazard involved 13 14 and the complexity of the corrective action needed, the DIRECTOR may agree to or specify a longer time frame, not to exceed 10 calendar days after the inspection, for the operator to 15 correct violations of a CRITICAL ITEM. 16 17 (5) The operator shall correct noncritical violations by a date and time agreed to or specified by the DIRECTOR but no later than 30 calendar days after the inspection. The 18 19 DIRECTOR may approve a compliance schedule that extends beyond this time limit if a 20 written schedule of compliance is submitted by the operator and no health hazard exists or 21 will result from allowing an extended schedule of compliance.

(e) Notwithstanding the grade criteria established above, whenever a second consecutive
 violation of the same item of 2, 4, or 6 demerit points is discovered, the permit may be suspended
 or in lieu thereof, the establishment shall be downgraded to the next lower grade.

4 (f) The operator shall ensure that he/she, or a designee, be present during inspections of
5 a PUBLIC SWIMMING POOL by the DEPARTMENT.

6 (g) The Inspection Report and Letter Grade Placard shall be posted in a conspicuous area
7 designated by the DIRECTOR or his/her representative.

8

## §4642. Closure of Public Swimming Pool.

9 (a) Except as specified in (b) of this Section, an operator shall immediately discontinue 10 operations and notify the DEPARTMENT if an IMMINENT HEALTH HAZARD may exist because of an 11 emergency such as a fire, flood, extended interruption of electrical or water service, sewage 12 backup, misuse of poisonous or toxic materials, gross insanitary occurrence or condition, or other 13 circumstance that may endanger public health, such those listed in (d) of this Section.

(b) An operator need not discontinue operations in an area of a PUBLIC SWIMMING POOL
that is unaffected by the IMMINENT HEALTH HAZARD.

(c) Failure to report an IMMINENT HEALTH HAZARD to the DEPARTMENT may result in
 immediate suspension of the Sanitary Permit.

18 (d) The DIRECTOR shall order immediate correction of the following violations, or
19 immediate closure of the PUBLIC SWIMMING POOL whenever he finds any of the following
20 conditions:

21

22

(1) Failure to continuously operate the PUBLIC SWIMMING POOL filtration or DISINFECTION equipment;

1	(2)	Failure to provide adequate supervision and staffing as described in these	
2	rules and regulations;		
3	(3)	Failure to provide the minimum disinfectant residual levels;	
4	(4)	pH below 6.5 or above 8.0;	
5	(5)	Use of an unapproved or contaminated water supply source for potable	
6	water use;		
7	(6)	Unprotected overhead electrical wires within 20 feet horizontally of the	
8	PUBLIC SWIMMING POOL;		
9	(7)	Non-GFCI protected electrical receptacles within 20 feet of the inside wall	
10	of the PUBLIC SWIMMING POOL;		
11	(8)	Failure to maintain an emergency lighting source;	
12	(9)	Absence of all required lifesaving equipment on DECK;	
13	(10)	PUBLIC SWIMMING POOL bottom not visible;	
14	(11)	Total absence of or improper depth markings at a PUBLIC SWIMMING POOL;	
15	(12)	Plumbing CROSS-CONNECTIONS between the drinking water supply and	
16	PUBLIC SWIM	IMING POOL water or between sewage system and the PUBLIC SWIMMING	
17	POOL includi	ng filter backwash facilities;	
18	(13)	Failure to provide and maintain an ENCLOSURE or BARRIER to inhibit	
19	unauthorized	access to the PUBLIC SWIMMING POOL when required;	
20	(14)	Use of unapproved chemicals or the application of chemicals by	
21	unapproved r	nethods to the PUBLIC SWIMMING POOL water;	
22	(15)	Broken, unsecured, or missing main drain grate or any submerged suction	
23	outlet grate in	n the PUBLIC SWIMMING POOL;	

(16)1 Number of BATHERS/PATRONS exceeds the THEORETICAL PEAK 2 **OCCUPANCY:** 

(17)Broken glass or sharp objects in PUBLIC SWIMMING POOL or on DECK area; 3 (18)Failure to possess a valid Sanitary Permit; or 4

5

It is declared a "public nuisance" as defined in 10 GCA §20107. (19)

When the DIRECTOR orders closure of a PUBLIC SWIMMING POOL, he shall issue a 6 (e) written order to the PUBLIC SWIMMING POOL owner, operator, or his representative stating that 7 8 the PUBLIC SWIMMING POOL is to be closed immediately and specifying corrective action(s) to 9 be taken. The PERSON to whom the order is issued shall close the PUBLIC SWIMMING POOL immediately and shall prohibit any PERSON from using it. The DIRECTOR or his/her representative 10 shall post a notice, easily visible to the public, stating that said POOL is closed by order of the 11 12 DIRECTOR and that swimming is prohibited.

(f) After the initial written order to close the PUBLIC SWIMMING POOL is issued, and 13 14 after the specified corrective action(s) has been taken, the owner, operator or his representative 15 shall notify the DIRECTOR that the PUBLIC SWIMMING POOL is ready for re-inspection.

16 (g) If upon re-inspection the corrective action is not approved, the PUBLIC SWIMMING 17 POOL shall remain closed and kept out of use until corrective action is approved.

18 (h) A PERSON shall not remove a notice of closure posted by the DIRECTOR or his/her 19 representative, except with the express written consent of the DIRECTOR.

§4643. Variance. 20

21 (a) The DIRECTOR may, on written application and after review, grant a VARIANCE from a specific provision of these rules and regulations, subject to appropriate conditions which 22 23 shall include a time schedule for compliance when such VARIANCE is in harmony with the general

purposes and intent of these rules and regulations, and when there are practical difficulties or
unnecessary hardship in complying with such provision. The application shall include, but not be
limited to:

4 5 (1) A citation of the section to which the VARIANCE is requested;

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- (2) A statement as to why the applicant is unable to comply with the section to
- 6 which the VARIANCE is requested;
- 7

(3) The nature and duration of the VARIANCE requested;

- 8 (4) A statement of how the intent of these rules and regulations will be met and 9 the reasons why the public health or SAFETY would not be jeopardized if the VARIANCE 10 was granted; and
- 11 (5) A full description of any policies, procedures, or equipment that the
  applicant proposes to use to rectify any potential increase in health or SAFETY risks created
  by granting the VARIANCE.
- 14 (b) A VARIANCE request from an existing PUBLIC SWIMMING POOL that possessed a 15 valid Sanitary Permit at the time of the effective date of these rules and regulations shall be 16 approved by the DIRECTOR, provided no injuries or disease transmission have occurred in the 17 existing PUBLIC SWIMMING POOL as a result of the deficiency or non-compliance, and the 18 VARIANCE request:
- 19
- (1) Is not for the requirements of \$4608-4615 and \$4634-4642; and
- 20
- (1) Is not for the requirements of \$\$+000 +015 and \$\$+000 +042,
- 0 (2) Will not result in an IMMINENT HEALTH HAZARD.
- 21 (c) Any VARIANCE approved pursuant to (b) of this Section shall remain in effect
  22 indefinitely until:

1	(1) The Sanitary Permit of the existing PUBLIC SWIMMING POOL expires and					
2	not renewed within two years from the date of the expiration;					
3	(2) The existing PUBLIC SWIMMING POOL undergoes SUBSTANTIAL					
4	ALTERATION; OR					
5	(3) An injury or a disease transmission is documented as a result of the					
6	VARIANCE.					
7	(d) The DIRECTOR, not his/her representative, is delegated the authority to approve					
8	such VARIANCE.					
9	§4644. Exemption.					
10	A PUBLIC SWIMMING POOL is exempt from the provisions relating to BARRIERS and					
11	ENCLOSURES under §4627 and §4630 when all of the following alternative SAFETY measures are					
12	in place:					
13	(1) 24-hour manned security;					
14	(2) monitored video surveillance of the entire perimeter of the facility; and					
15	(3) signage posted in a conspicuous place communicating that unauthorized entry					
16	is prohibited.					
17	§4645. Severability.					
18	If any provision or the application of any provision of these rules and regulations is held					
19	invalid, that invalidity shall not affect other provisions or applications of these rules and					
20	regulations.					