

**Department of State Health Services
Council Agenda Memo for State Health Services Council
November 4, 2009**

Agenda Item Title: New rules concerning regulation of public interactive water features and fountains

Agenda Number: 7c

Recommended Council Action:

For Discussion Only

For Discussion and Action by the Council

Background:

In the summer of 2008, Texas experienced an outbreak of cryptosporidiosis, a waterborne illness, which affected more than 3,000 people. Senate Bill (SB) 968, relating to interactive water features and fountains, passed in the 81st Legislature, Regular Session, 2009, as a result of a joint effort by the pool industry and municipal units of government. Emergency rules imposing sanitary standards on interactive water features and fountains became effective on July 3, 2009, and will expire December 29, 2009.

The Public Health Sanitation & Consumer Product Safety Group with the Policy, Standards, and Quality Assurance Unit of the Division for Regulatory Services is responsible for the promulgation of rules to implement the regulation of interactive water features and fountains. The regulation and enforcement of interactive water features and fountains will be under local health authorities and local health departments. In areas with no local health authority, DSHS will be the regulatory authority. Although the number of public interactive water features and fountains in Texas is unknown, the majority are believed to be in municipalities or in counties with large populations.

The DSHS program implementing SB 968 will be funded through general revenue. Local governments and municipalities have the ability to impose a permit and/or inspection fee to fund implementation of the program at the local level.

Summary:

The purpose of the rules is to impose sanitary standards for interactive water features and fountains to help prevent waterborne illness outbreaks. These rules implement SB 968, which added new Section 341.0695, to the Health and Safety Code. The proposed rules replace emergency rules that will expire on December 29, 2009.

Interactive water features and fountains are a relatively new recreational aquatic feature and were not regulated under previous statute. These rules provide regulatory authority to municipalities, counties, and DSHS, including permitting, inspection, and closure.

This rule will impact owner/operators of public interactive water features or fountains that must provide safe water standards within the prescribed limits for bacteria and acidity, as well as safe operating standards for these water features. Businesses that operate a public interactive water feature and fountain will have to add a secondary disinfection system, add warning and notification signage, and provide training for their operators to become certified.

The anticipated outcome is the ability to inspect, monitor, and enforce good public health practices at public interactive water features and fountains, such as chlorine levels, which will prevent the transmission of disease caused by bacteria and the parasite, cryptosporidium.

The effectiveness of the rules will be measured by the number of interactive water features and fountains in compliance with the safety standards for bacteria and acidity prescribed in the statute and rules.

Summary of Input from Stakeholder Groups:

The draft rules were made available on the Policy, Standards, and Quality Assurance swimming pool and spa website http://www.dshs.state.tx.us/poolspa/proposedpermanentrule7_9_2009Draft.pdf. Key external stakeholders and internal stakeholders were e-mailed copies of the draft rules and allowed time for review and comment.

External stakeholders include: Association of Pool and Spa Professionals, Texas Municipal League, Texas Apartment Association, Code Enforcement Association of Texas, Texas Hotel & Lodging Association, Texas Association of Local Health Officials, Texas Public Pool Council, Pool Safety Council, Independent Pool and Spa Service Association, Texas Children’s Hospital, Texas Environmental Health Association, and the Texas Public Health Association.

No comments have been received in response either to the draft rules or to the implementation of the emergency rules on July 3, 2009.

Proposed Motion: Motion to recommend HHSC approval for publication of rules contained in agenda item #7c

Approved by Assistant Commissioner/Director: Kathryn C. Perkins, R.N., M.B.A. **Date:** 9/17/09

Presenter: Paula Anderson, R.S., M.P.H., Manager **Program:** Public Health Sanitation & Consumer Product Safety Group **Phone No.:** 834-6788

Approved by CPCPI: Carolyn Bivens **Date:** 9/17/2009

Title 25. HEALTH SERVICES
Part 1. DEPARTMENT OF STATE HEALTH SERVICES
Chapter 265. General Sanitation
New Subchapter M. Interactive Water Features and Fountains
New §§265.301 – 265.308

Proposed Preamble

The Executive Commissioner of the Health and Human Services Commission on behalf of the Department of State Health Services (department) proposes new §§265.301 – 265.308, concerning the regulation of public interactive water features and fountains (PIWFs) in Texas.

BACKGROUND AND PURPOSE

The 81st Texas Legislature, Regular Session, 2009, passed Senate Bill 968, which amended the Health and Safety Code by adding new §341.0695. Section 341.0695 imposed sanitary requirements for PIWFs and required adoption of emergency rules to implement those requirements within 30 days of the effective date of the Act. The Act became effective on June 19, 2009, the date that Senate Bill 968 was signed by the governor. The new rules replace an emergency rule adopted by the Executive Commissioner of the Health and Human Services Commission that became effective on July 3, 2009, was published in the July 17, 2009 issue of the *Texas Register*, and will expire on December 29, 2009.

SECTION-BY-SECTION SUMMARY

Section 265.301 describes the scope and purpose of the rules for PIWFs and includes exemptions for certain types of PIWFs. Section 265.302 contains definitions of terms and acronyms used in this subchapter. Section 265.303 establishes requirements for the operation and maintenance of PIWFs, including accreditation requirements for operators, safety signage, sanitation of the facility equipment, and types of operational records that should be retained and how long the records for the facility must be retained by the owner/operator.

Section 265.304 establishes requirements for water supply and disposal of wastewater from PIWFs. Section 265.305 establishes requirements for a water circulation system including the circulation turnover time. Section 265.306 establishes water quality standards and water disinfection requirements for PIWFs. These requirements are designed to protect users against infection by the parasite, *Cryptosporidium*, which is the cause of most outbreaks of recreational waterborne illness in the United States. This section also establishes parameters for testing the water in PIWFs for the presence of harmful bacteria.

Section 265.307 defines the scope of inspection authority and the authority to charge a fee for inspections and permitting of PIWFs by municipalities, counties, and the department. Section 265.308 provides a municipality, county, or the department the ability to close a PIWF under certain conditions. Section 265.308 also specifies the right of an owner/operator to have a hearing if the facility is closed, and the procedures that must be followed in order to close a PIWF.

FISCAL NOTE

Susan E. Tennyson, Section Director, Environmental and Consumer Safety Section, has determined that for each year of the first five-year period that the sections will be in effect, there will be fiscal implications to local governments as a result of administering and enforcing the sections as proposed. Further, Ms. Tennyson has determined that there will be no fiscal implications to state government as a result of administering and enforcing the sections as proposed.

Although the number of PIWFs in Texas is unknown, the majority of PIWFs are found in municipalities or in counties with large populations. The statute under which these rules are promulgated provides municipalities, counties, and the department with the authority to collect inspection and permitting fees to mitigate the costs of providing these services. The fee amounts are dependent upon the costs to inspect and permit PIWFs. Because the number and the locations of PIWFs are unknown, the revenue generated by licensure of PIWFs and costs incurred by municipalities or counties with PIWFs cannot be determined.

Persons that own/operate a PIWF must provide safety, warning, and notification signage at each PIWF. The cost of this signage can be as little as \$100 or as high as \$1,000 per facility and is dependent upon the characteristics of the signs that will be posted. PIWFs will be required to install a secondary disinfection system. The cost of the system is dependent upon the size of the PIWF, the number of gallons used by the PIWF, and the type of secondary disinfection system that is installed. The estimated cost of retrofitting with the more expensive systems can begin at \$5,000 and go as high as \$20,000 for the initial installation. Operating costs would be dependent upon the rate charged for electricity, the size of the system, and proper maintenance of the system and facility. Retrofitting with the least expensive secondary disinfection system for the largest facility could cost approximately a maximum of \$3,000 annually. Other costs would be obtaining certification of operators for these facilities, which is approximately \$250 for a five-year certification. Most of these costs will be experienced within the first year after the rule is in effect.

SMALL AND MICRO-BUSINESS ECONOMIC IMPACT ANALYSIS

Ms. Tennyson has also determined that there will not be anticipated adverse economic costs to micro-businesses as a result of these rules. Micro-businesses do not own/operate PIWFs.

In addition, Ms. Tennyson has determined that there are anticipated economic costs to small and large businesses required to comply with the new rules as proposed. Businesses that operate PIWFs will have to add a secondary disinfection system, warning and notification signage, and provide training for their operators to become certified. Without information about the number of PIWFs, their locations, or ownership information, the number of small businesses that may be directly affected by these rules cannot be determined.

REGULATORY FLEXIBILITY ANALYSIS

There are no alternative methods of achieving the purpose of the proposed new rules that are consistent with the health, safety, and environmental welfare of the state so no alternative regulatory methods have been considered.

ECONOMIC COSTS TO PERSONS AND IMPACT ON LOCAL EMPLOYMENT

There are no anticipated economic costs to persons other than local governments or small or large businesses required to comply with the new rules as proposed. There is no anticipated impact on local employment.

PUBLIC BENEFIT

In addition, Ms. Tennyson has also determined that for each year of the first five years the sections are in effect, the public will benefit from adoption of the rules. The public benefit anticipated as a result of enforcing or administering the rules is to ensure the health and safety of anyone using a PIWF by preventing the transmission of disease caused by bacteria and the parasite, *Cryptosporidium*.

REGULATORY ANALYSIS

The department has determined that this proposal is not a "major environmental rule" as defined by Government Code, §2001.0225. "Major environmental rule" is defined to mean a rule the specific intent of which is to protect the environment or reduce risk to human health from environmental exposure and that may adversely affect, in a material way, the economy, a sector of the economy, productivity, competition, jobs, the environment or the public health and safety of a state or a sector of the state. This proposal is not specifically intended to protect the environment or reduce risks to human health from environmental exposure.

TAKINGS IMPACT ASSESSMENT

The department has determined that the proposed new rules do not restrict or limit an owner's right to his or her property that would otherwise exist in the absence of government action and, therefore, do not constitute a taking under Government Code, §2007.043.

PUBLIC COMMENT

Comments on the proposal may be submitted to Paula Anderson, Public Health Sanitation and Consumer Product Safety Group, Department of State Health Services, P.O. Box 149347, Mail Code 1987, Austin, Texas 78714-9347, 512-834-6770, ext 2303, or by email to paula.anderson@dshs.state.tx.us. Comments will be accepted for 30 days following publication of the proposal in the *Texas Register*.

LEGAL CERTIFICATION

The Department of State Health Services General Counsel, Lisa Hernandez, certifies that the proposed rules have been reviewed by legal counsel and found to be within the state agencies' authority to adopt.

STATUTORY AUTHORITY

The new rules are required and authorized by Health and Safety Code, §341.0695, Interactive Water Features and Fountains; Health and Safety Code, §341.002, which authorizes the Executive Commissioner of the Health and Human Services Commission to adopt rules and standards for sanitation and protection of health; and Government Code, §531.0055, and Health and Safety Code, §1001.075, which authorize the Executive Commissioner of the Health and Human Services Commission to adopt rules and policies necessary for the operation and provision of health and human services by the department and for the administration of Health and Safety Code, Chapter 1001.

The new rules affect Health and Safety Code, Chapters 341 and 1001; and Government Code, Chapter 531.

Legend: (Proposed New Rules)
Regular Print = Proposed new language

§265.301. General Provisions.

(a) Purpose of the rules. These rules implement Texas Health and Safety Code, §341.0695.

(b) Scope of rules. These rules address minimum sanitation requirements for a public interactive water feature and fountain (PIWF). These standards are based in part on the American National Standards Institute and International Aquatic Foundation Standards for Aquatic Recreation Facilities (ANSI/IAF-9), "Designing Public Swimming Facilities Guidelines," and the Centers for Disease Control and Prevention "Operating Public Swimming Pools Guidelines." These rules are in addition to any county, municipal, or federal laws applicable to public interactive water features and fountains.

(1) These rules apply to all PIWFs whether the PIWF shares or does not share a water supply, disinfection system, filtration system, circulation system, or any other treatment system that allows water to co-mingle with any other recreational water feature or system including, but not limited to a pool, spa, therapy pool, wave action pool, activity pool, catch pool, leisure river, amusement park attraction or wade pool.

(2) A PIWF that is connected with or shares a water supply, disinfection system, filtration system, circulation system, or any other treatment system, or for which the water supply is treated in common with any other recreational water feature or system including, but not limited to a pool, spa, therapy pool, wave action pool, activity pool, catch pool, leisure river, amusement park attraction, or wade pool shall be subject to the most stringent standards to which any of the water bodies or features are subject except as otherwise indicated in this subchapter.

(3) A PIWF that is supplied entirely by drinking water that is not recirculated is not subject to §265.306 of this title (relating to Water Quality at Public Interactive Water Features and Fountains).

(4) These rules do not apply to a PIWF that uses freshwater originating from a natural watercourse for recreational purposes and that releases the freshwater back into the same natural water course.

(c) PIWF standards. Where a local regulatory authority has jurisdiction for the regulation of PIWFs, such authorities may adopt standards that vary from these standards; however, such standards shall be the same as, equivalent to, or more stringent than these standards.

§265.302. Definitions. The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

(1) Act--Refers to Health and Safety Code, §341.0695, relating to Interactive Water Features and Fountains.

(2) Activity pool--A pool designed for casual water play including splashing activities and the use of attractions placed in the pool for recreational purposes.

(3) Amusement park attraction--Rides or attractions usually located in amusement parks that permit user contact with water.

(4) ANSI--American National Standards Institute, 25 West 43rd Street (4th Floor), New York, New York 10036, telephone (212) 642-4900, web site: www.ansi.org.

(5) ANSI/IAF-9 2005--American National Standards Institute and International Aquatic Foundation Standards for Aquatic Recreation Facilities.

(6) AquaTech--Starfish Aquatics Institute, Human Kinetics Aquatic Education Center, P.O. Box 5076, Champaign, Illinois, 61825-5076, telephone (800) 747-4457, web site: www.aquaticeducationcenter.com.

(7) APSP--Association of Pool and Spa Professionals, 2111 Eisenhower Avenue, Suite 500, Alexandria, Virginia 22314-4695, telephone (703) 838-0083, website: www.apsp.org.

(8) ASPSA--American Swimming Pool and Spa Association, 1108 Little River Drive, Elizabeth City, North Carolina 27909, telephone (252) 331-2301, web site: www.swimmingpooloperator.com.

(9) Automatic chemical feeder--An automatic device for adding chemical to water in a public interactive water feature and fountain (PIWF). An automatic chemical feeder has valves controlled by electronic equipment that dispense chemicals based on signals from probes continuously monitoring the water's properties.

(10) Available chlorine--Rating of chlorine-containing products for total oxidizing power (See definition number (30) "Free available chlorine.")

(11) Backflow prevention device--A device that is designed to prevent a physical connection between a potable water system and a non-potable source such as a pool, spa, or PIWF, or to prevent a physical connection between a pool, spa, or PIWF and a sanitary sewer or wastewater disposal system. (See definition number (22) "Cross-connection control device.")

(12) Bacteria--Single-celled microorganisms of various forms, some of which cause infections or disease.

(13) Bromine--A chemical element (Br_2) that exists as a liquid in its elemental form or as part of a chemical compound that is a biocide agent used to disinfect water in a pool, spa, or PIWF.

(14) CDC--Centers for Disease Control and Prevention, 1600 Clifton Road, Atlanta, Georgia 30333, telephone (800) 232-4636, web site: www.cdc.gov.

(15) Catch pool--A pool located at the terminus of a waterslide and intended for terminating the slide action and providing an exit to a deck or walkway.

(16) Chlorine--A chemical element (Cl_2) that exists as a gas in its elemental form or as part of a chemical compound that is an oxidant. Chlorine is a biocide agent used to disinfect water in a pool, spa, or PIWF.

(17) Chloramine--A compound formed when chlorine combines with nitrogen or ammonia that, when found in significant amounts in the water of a PIWF, may cause eye and skin irritation and may have an objectionable odor.

(18) Circulation equipment--The mechanical components that are part of a circulation system for a PIWF. Circulation equipment may include but is not limited to, categories of pumps; treatment tanks; hair and lint strainers; filters; valves; gauges; meters, heaters; inlet/outlet fittings; and chemical feeding devices. The components have separate functions, but when connected to each other by piping, perform as a coordinated system for purposes of maintaining PIWF water in a clear, sanitary, and desirable condition for use.

(19) Circulation system--An arrangement of mechanical equipment or components, connected by piping to a PIWF in a closed circuit. The function of a circulation system is to direct water from the PIWF, causing it to flow through the various system components for purposes of clarifying, heating, purifying, and returning the water back to the PIWF.

(20) Coliform bacteria--Bacteria found in the intestines and fecal matter of warm-blooded animals.

(21) Combined chlorine--The portion of total chlorine in a water chemical combination with ammonia, nitrogen, and/or organic compounds, mostly comprised of chloramines. Combined chlorine plus free available chlorine equals total residual chlorine.

(22) Cross-connection control device--A device that is designed to prevent a physical connection between a potable water system and a non-potable source such as a pool, spa, or PIWF, or to prevent a physical connection between a pool, spa, or PIWF and a sanitary sewer or wastewater disposal system. (See definition number (11) "Backflow prevention device.")

(23) Cryptosporidiosis--A diarrheal disease caused by microscopic parasites of the genus *Cryptosporidium*. Water is the most common method of transmission and *Cryptosporidium* is one of the most frequent causes of waterborne illness among humans in the United States.

(24) Cyanuric acid--A chemical that reduces the loss of chlorine in water due to the ultraviolet rays of the sun. Also known by the names stabilizer, isocyanuric acid, conditioner and triazinetrione.

(25) Department--Department of State Health Services, Environmental and Consumer Safety Unit, Policy, Standards, and Quality Assurance, P.O. Box 149347, MC 1987, Austin, Texas 78714-9347, telephone (512) 834-6788, website: www.dshs.state.tx.us.

(26) Disinfectant--Energy or chemicals used to kill undesirable or pathogenic (disease causing) organisms at a level adequate to make the desired kill.

(27) Disinfection equipment--Equipment designed to apply or deliver a disinfectant (such as chlorine) at a controlled rate.

(28) DPD--A chemical testing reagent (N,N-Diethyl-P-Phenylenediamine) used to measure the levels of available chlorine or bromine in water by yielding a series of colors ranging from light pink to dark red.

(29) Filter--A device that removes undissolved particles from water by recirculating the water through a porous substance (filter media or element).

(30) Free available chlorine--That portion of the total chlorine remaining in the chlorinated water that is not combined with ammonia or nitrogen compounds and that will react chemically with undesirable or pathogenic organisms. Free chlorine is also known as free available chlorine. Combined chlorine plus free available chlorine equals total residual chlorine.

(31) Free residual chlorine--For purposes of this rule free residual chlorine means free available chlorine. (See definition number (30) "Free available chlorine.")

(32) Interactive water feature or fountain--An installation that includes water sprays, dancing water jets, waterfalls, dumping buckets, or shooting water cannons in various arrays for the purpose of wetting the persons playing in the spray streams. An interactive water feature or fountain may include devices or activities such as slides, climbing and crawling structures, visual effects, user-actuated mechanical devices, and other user-controlled play elements.

(33) Labeled--Equipment or material to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation that maintains periodic inspection of production of labeled equipment or materials and by whose labeling the manufacturer indicates compliance with appropriate standards of performance in a specified manner.

(34) Leisure river--A pool with a near-constant depth in which the water and user are propelled by pumps in a river-like flow over a prescribed course or path. Leisure river pools are also known as lazy rivers.

(35) Local regulatory authority--The local enforcement body or authorized representative having jurisdiction over PIWFs and associated facilities.

(36) mJ--Millijoule, a unit of work or energy.

(37) mJ/cm²--Milljoules per centimeter squared.

(38) NRPA--National Recreation and Parks Association, 22377 Belmont Ridge Road, Ashburn, Virginia 20148-4501, telephone 1-800-626-6772, website: www.nrpa.org.

(39) NSF--National Sanitation Foundation International, P.O. Box 130140, 789 N. Dixboro Drive, Ann Arbor, Michigan 48113-0140, telephone (800) 673-6275, website www.nsf.org.

(40) NSF/ANSI-50 Standard - National Sanitation Foundation International/American National Standard Institute Standard 50, Equipment for Swimming Pools, Spas, Hot Tubs and other Recreational Water Facilities.

(41) NSPF--National Swimming Pool Foundation, 4775 Granby Circle, Colorado Springs, Colorado 80919-3131, telephone (719) 540-9119, web site: www.nspf.com.

(42) ONPG-MUG--Ortho-nitrophenyl-beta-D-galactopyranoside-4-methylumbelli-feryl-beta-D-glucuronide, an enzyme substrate assay used for measuring total coliform and *E. coli* in water as described in the Code of Federal Regulations, Title 40, Part 141.

(43) Owner/operator--The owner of the property upon which the PIWF is located, and/or operator, business manager, complex manager, property owners association manager, rental agent, lessee, licensee, concessionaire, or other individual who is in charge of the day to day operations or maintenance of the property. The owner/operator is responsible to ensure that the PIWF complies with state and local standards.

(44) Ozone (O₃)--A gas composed of oxygen that is generated on site and used to oxidize organic matter in water. It can be used as a supplemental sanitizer.

(45) Ozone generator--A device that produces ozone, usually by exposing air or oxygen to a corona discharge or ultraviolet light.

(46) Parts per million (ppm)--A unit measurement in chemical testing that indicates the parts by weight in relation to one million parts by weight of water. For the purposes of PIWF water chemistry, ppm is considered to be essentially identical to the term milligrams per liter (mg/L).

(47) pH--A value expressing the relative acidic or basic tendencies of a substance, such as water, as indicated by the hydrogen ion concentration. The pH is expressed as a number on the scale of zero to 14, less than one being most acidic, 1 to 6.9 being acidic, 7 being neutral, 7.1 to 14 being basic, and 14 being most basic.

(48) Pool--Any man-made permanently installed or non-portable structure, basin, chamber, or tank containing an artificial body of water that is used for swimming, diving, aquatic sports, or other aquatic activity other than a residential pool and that is operated by an owner, lessee, operator, licensee or concessionaire, regardless of whether a fee is charged for use. The

pool may be either publicly or privately owned. The term does not include a spa or a decorative fountain that is not used as a pool. References within the standard to various types of pools are defined by the following categories.

(A) Class A pool--Any pool used, with or without a fee, for accredited competitive aquatic events such as Federation Internationale De Natation Amateur (FINA), United States Swimming, United States Diving, National Collegiate Athletic Association (NCAA), National Federation of State High School Associations (NFSHSA), events. A Class A pool may also be used for recreation.

(B) Class B pool--Any pool used for public recreation and open to the general public with or without a fee.

(C) Class C pool--Any pool operated for and in conjunction with:

(i) lodging such as hotels, motels, apartments, condominiums, or mobile home parks;

(ii) property owner associations, private organizations, or clubs; or

(iii) a school, college or university while being operated for academic or continuing education classes. The use of such a pool would be open to occupants, members or students, etc., and their guests but not open to the general public.

(D) Class D pool--A wading pool with a maximum water depth of 24 inches at any point.

(49) Potable water--Water that is bacteriologically safe and otherwise suitable for drinking. Potable water supplies may be regulated by the Texas Commission on Environmental Quality or local regulatory authority as a drinking water system.

(50) Public interactive water feature or fountain (PIWF)--Any indoor or outdoor interactive water feature or fountain that is maintained for public recreation and that is operated by an owner, lessee, operator, licensee, or concessionaire, regardless of whether a fee is charged for use. The term includes, but is not limited to, an interactive water feature or fountain that is open exclusively to members of an organization and their guests, residents of a multi-unit apartment building or apartment complex, residential real estate development, or other multi-family residential area, schools, day care facilities, youth camp, or hotel or other public accommodations facility. A PIWF may be publicly or privately owned. A PIWF does not include an interactive water feature or fountain located on private property under the control of the property owner or the owner's tenant serving a single-family residence or duplex and that is intended for use by not more than two resident families and their guests.

(51) Pump--A mechanical device, usually powered by an electric motor that causes hydraulic flow and pressure for the purpose of filtration, heating, and circulation of the PIWF water.

(52) Recreational water park--A property or any portion thereof upon which one or more PIWFs are located.

(53) Regulatory authority--Any federal, state, or local enforcement body or authorized representative having jurisdiction over PIWFs.

(54) Shall--Indicator of the mandatory provisions of these rules.

(55) Spa--A constructed permanent or portable structure that is 2 feet or more in depth and that has a surface area of 250 square feet or less or a volume of 3,250 gallons or less and that is intended to be used for bathing or other recreational uses and is not drained and refilled after each use. It may include, but is not limited to, hydrojet circulation, hot water, cold water, mineral baths, air induction bubbles, or any combination thereof. A spa, as is defined in these rules, does not refer to a business establishment such as a day spa or a health spa. Industry terminology for a spa includes, but is not limited to, "hydrotherapy pool," "whirlpool," "hot spa," "hot tub," etc.

(56) Stabilizer--A chemical that reduces the loss of chlorine in water due to the ultraviolet rays of the sun. Also known by the names cyanuric acid, isocyanuric acid, conditioner, and triazinetrione.

(57) TCEQ--Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, telephone (512) 239-1000, web site: www.tceq.state.tx.us.

(58) Therapy pool--A therapeutic pool or spa that is operated exclusively for therapeutic purposes, such as physical therapy, and is under the direct supervision and control of licensed medical personnel.

(59) Total residual chlorine--The sum of both the free available chlorine and combined chlorine.

(60) Treatment tank--The vessel, chamber, or tank used to collect the water that has been sprayed, dumped, or otherwise used at the PIWF and returned through the drains.

(61) Turnover rate--The period of time (usually in hours) required to circulate a volume of water equal to the total pool, spa, or PIWF capacity.

(62) Ultraviolet light (UV)--Electromagnetic radiation that is invisible to the human eye with wavelengths on the border of x-rays, about 4 nanometers, to just beyond violet in the visible spectrum, about 380 nanometers.

(63) United States Environmental Protection Agency (EPA)--Ariel Rios Building, 12000 Pennsylvania Avenue, N.W., Washington, DC 20450, telephone (202) 272-0167, web site: www.epa.gov.

(64) User--A person using a PIWF and any adjoining deck area for the purpose of recreational aquatic activities.

(65) Wade pool--A pool that has a maximum depth of 24 inches at any point.

(66) Water quality testing device or kit--A product designed to measure the level of a specific chemical in the water of a PIWF. A water quality testing device or kit includes a method to provide a visual indication of chemical level, and may include one or more testing reagents and accessory items.

(67) Wave action pool--Any pool designed to simulate breaking or cyclic waves.

§265.303. Operation and Maintenance of Public Interactive Water Features and Fountains.

(a) Public interactive water feature and fountain (PIWF) operation requirements. PIWFs shall be operated and maintained under the supervision and direction of a properly trained and certified operator who is responsible for sanitation and proper maintenance of the PIWF, and who is responsible for maintaining all physical and mechanical equipment and records. Training and certification shall be obtained by completion of one of the following courses or its equivalent:

- (1) the NRPA, "Aquatic Facility Operator" (A.F.O.);
- (2) the NSPF, "Certified Pool Operator" (C.P.O.);
- (3) the ASPSA, "Licensed Aquatic Facility Technician" (L.A.F.T.); or
- (4) AquaTech Pool and Aquatic Facility Operator.

(b) Operator credentials. The operator of the PIWF who is responsible for the sanitation and proper maintenance of the PIWF shall provide evidence of current certification as specified in subsection (a) of this section during inspection by the regulatory authority.

(c) Sanitation of PIWFs. An owner, manager, operator, or other attendant in charge of a PIWF shall maintain the water feature or fountain in a sanitary condition.

(1) The PIWF treatment tank shall be completely drained and cleaned at a frequency necessary to maintain water quality and sanitary conditions.

(2) Any dirt, trash, refuse, animal waste, or debris on the surface of a zero depth PIWF shall be removed from the surface and the surfaces shall be flushed and sanitized with a United States Environmental Protection Agency approved disinfectant as often as is needed to prevent contamination of the water in the PIWF.

(3) The surfaces of zero depth PIWFs and the decks of all PIWFs shall be kept clean and free of pooled water to prevent the growth of algae and bacteria.

(d) Signs for PIWFs. Warning and notification signs shall be posted at all PIWFs when open or in use, and shall be securely mounted, clearly visible, and easily read with letters in a contrasting color to the background. The required signage can be combined into a single sign. The signage shall provide the following notifications and warnings:

(1) pets prohibited, in letters at least 1 inch in height;

(2) changing diapers in the public interactive water feature or fountain is prohibited, in letters at least 1 inch in height;

(3) use of the public interactive water feature or fountain if a person is infected with a contagious disease or condition is prohibited, in 2 inch letters;

(4) do not drink the water, in 2 inch letters; and

(5) use of the public interactive water feature or fountain if ill with diarrhea is prohibited, in letters at least 4 inches in height.

(e) PIWFs without an on-site owner/operator. At PIWFs without an on-site owner/operator a sign shall be posted that provides a contact number to be used in the event of a malfunction, unsanitary condition, or any other non-emergency problem requiring correction at the PIWF. Letters and numbers on the posted sign shall be a minimum of 2 inches in height and the sign shall be clearly visible.

(f) Records for PIWFs. The following records pertaining to the operation, maintenance, cleaning, sanitation, and chemical levels shall be kept for a minimum of 2 years and shall be made available during inspection by the regulatory authority:

(1) daily chemical log;

(2) chlorine, bromine, cyanuric acid, and pH test results;

(3) routine maintenance schedule and activities;

(4) preventative maintenance schedule and activities;

(5) documentation that circulation equipment meets the NSF/ANSI-50 Standard, if applicable;

(6) copy of manufacturer's instructions for operation of the disinfection equipment, chemical control equipment, and chemical feed system;

(7) documentation of the facility's method for determining turnover rates as described in §265.305(c) of this title (relating to Circulation and Disinfectant Systems for Public Interactive Water Features and Fountains (PIWFs)); and

(8) documentation that the turnover rates meet the requirements as described in §265.305(c) of this title.

§265.304. Water Supply and Wastewater Disposal.

(a) Water supply. The initial water supply of a public interactive water feature or fountain (PIWF) shall be from a potable water system that:

(1) meets applicable standards of 30 Texas Administrative Code, Chapter 290, "Public Drinking Water," Subchapter D, "Rules and Regulations for Public Water Systems"; or

(2) meets the approval of the department or local regulatory authority.

(b) Water distribution system. All portions of the water distribution system serving a PIWF shall be protected against backflow and back siphonage. No direct mechanical connection shall be made between the chlorinating equipment or system of piping for the PIWF and a sanitary sewer system, septic system, or other wastewater disposal system.

(c) Backwash water. Filter backwash water or drainage water from a PIWF shall be discharged or disposed of as wastewater in accordance with the requirements of the Texas Commission on Environmental Quality or local regulatory authority.

§265.305. Circulation and Disinfectant Systems for Public Interactive Water Features and Fountains.

(a) General circulation requirements. The circulation system consisting of pumps, piping, filters, return inlets, water conditioning equipment, disinfection equipment, surge chamber, treatment tank and other ancillary equipment shall provide adequate circulation of water and be designed to accommodate 100% of the turnover flow rate and maintain the distribution of disinfectant through all parts of the public interactive water feature or fountain (PIWF).

(b) Circulation equipment. Where circulation equipment falls within the scope of NSF and ANSI Standard 50 (NSF/ANSI-50 Standard), such equipment shall meet the standard. Conformity with NSF/ANSI-50 as evidenced by the listing or labeling of such equipment by a testing laboratory or by separate documentation is required.

(c) Turnover time. The turnover time for the circulation of water in a PIWF that is combined or circulated with water from other aquatic facilities such as pools, water slides, or wave pools shall be at least once every 4 hours. The turnover time for circulation of water in a PIWF that is not combined or circulated with water from other aquatic facilities such as pools, water slides or wave pools shall be at least once every hour.

(d) Treatment tank. The treatment tank shall:

(1) be designed to provide ready access for cleaning and inspections, and be capable of complete draining;

(2) have an automatic water level controller; and

(3) have any makeup water introduced into the treatment tank through an air gap or by another method which will prevent back flow and back-siphonage.

§265.306. Water Quality at Public Interactive Water Features and Fountains.

(a) Public interactive water features and fountains (PIWF) shall be equipped with automatic disinfectant and pH feed equipment that provides continuous and effective disinfection and maintains the required pH of the water at all times.

(b) Disinfection, pH, and any other chemical control equipment shall:

(1) be capable of automatically adjusting chemical feed based on demand;

(2) be installed, maintained, operated, and repaired in accordance with manufacturer's instructions;

(3) be provided with make-up water supply lines to chemical feeder solution containers that have an air gap or other acceptable cross-connection control;

(4) be designed to prevent siphoning from the recirculation system to the solution container and to prevent siphoning of the chemical solution into the PIWF; and

(5) incorporate failure-proof features so that the chemical cannot feed into the PIWF, the piping system, or the water supply system if equipment or power fails, or if there is not adequate return flow to properly disperse the chemical.

(c) Disinfectant and cyanuric acid levels shall meet the following criteria at any time a PIWF is open or in use:

Figure: 25 TAC §265.306(c)

(d) The pH shall meet the following criteria at any time a PIWF is open or in use:

Figure: 25 TAC §265.306(d)

(e) Forms of chlorine containing stabilizer (cyanuric acid) shall not be used in indoor PIWFs.

(f) Chemicals used in a PIWF shall:

(1) be registered and labeled for use in recreational aquatic facilities, such as pools and spas, by the United States Environmental Protection Agency (EPA); and

(2) be used according to the chemical manufacturer's instructions for the chemical feed system in use; and

(3) comply with the NSF/ANSI-50 Standard certification for the chemical feed system.

(g) In addition to maintaining sanitizer, cyanuric acid, and pH levels as required in subsections (c) and (d) of this section, all PIWFs shall be equipped with a secondary disinfection system that will protect the public against infection by the parasite, *Cryptosporidium*.

(1) Secondary disinfection systems for a PIWF include:

(A) UV light disinfection;

(B) ozone;

(C) a product or process approved by the EPA to remove cryptosporidium from the water in pools, spas, or a PIWF; or

(D) an equivalent product, process, or system approved by the department.

(2) Water from the PIWF shall not be combined or circulated with water for other aquatic facilities such as pools, water slides, or wave pools unless:

(A) all of the water from the PIWF is treated with a secondary disinfection system prior to combining or circulating with water from other aquatic facilities; or

(B) all of the water in other aquatic facilities that is combined or circulated with water from the PIWF is treated with a secondary disinfection system.

(h) UV light disinfection systems shall:

(1) conform to the NSF/ANSI-50 Standard relating to Equipment for Pools, Spas, Hot Tubs, and Other Recreational Water Facilities;

(2) provide a validated dosage confirmed by a third party validation which results in a 3 log kill of *Cryptosporidium*;

(3) provide a validated dosage equivalent to $40\text{mJ}/\text{cm}^2$ or greater at the end of lamp life;

(4) include an automatic audible alarm to warn of a UV light disinfection unit malfunction or impending shutdown;

(5) be equipped with an automatic mechanism for shutting off the power to the UV light source whenever the protective UV unit cover is removed; and

(6) be installed in an enclosure designed to protect the operator against electrical shock or excessive radiation and that provides protection from UV exposure.

(i) Ozone disinfection systems shall meet the standards in the EPA Guidance Manual for Alternative Disinfectants and Oxidants, EPA Publication 815-R-99-014, April 1999, as amended.

(j) A water quality testing device or kit capable of accurately testing for and measuring pH, free and total chlorine, bromine, and cyanuric acid within the chemical ranges as required in this section shall be provided by the PIWF owner/operator.

(1) Free available chlorine and bromine levels shall be determined by use of the DPD method or its equivalent.

(2) Test reagents shall be properly stored and replaced at frequencies recommended by the manufacturer to assure accuracy of the tests.

(3) The water quality testing device or kit shall conform to the NSF/ANSI-50 Standard relating to Equipment for Pools, Spas, Hot Tubs, and Other Recreational Water Facilities.

(k) When a PIWF is open for use, tests for chlorine or bromine levels and pH shall be conducted at least once every 2 hours to assure compliance with subsections (a) and (b) of this section relating to required water quality parameters.

(1) If a system is used that continually monitors and automatically controls chlorine or bromine levels and pH then testing for chlorine or bromine and pH shall be conducted at least once every 4 hours.

(2) Tests for cyanuric acid levels shall be conducted at least once every 7 days of operation.

(1) Records of the chemical tests performed at a PIWF shall be kept for 2 years and shall be made available during inspection by the regulatory authority.

(m) If the water of a PIWF is sampled and tested for bacterial content the sample shall not:

(1) exceed 200 bacteria per milliliter as determined by heterotrophic plate count; or

(2) indicate the presence of total coliform organisms in a 100 milliliter sample by any of the following methods:

(A) multiple tube;

(B) membrane filter; or

(C) the Minimal Medium ONPG-MUG test described in the Code of Federal Regulations, Title 40, Part 141.

Figure: 25 TAC §265.306(c)

Disinfectant and Cyanuric Acid Levels	Minimum	Ideal	Maximum
Free Available Chlorine	1.0 ppm	3.0 – 5.0 ppm	8.0 ppm
Bromine	2.5 ppm	5.5 – 7.5 ppm	12.0 ppm
Combined Chlorine	0.0 ppm	0.0 ppm	0.2 ppm
Cyanuric Acid (Stabilizer) – Out-of-Door Facilities Only	0.0 ppm	20 ppm	60 ppm
Cyanuric Acid (Stabilizer) – Indoor Facilities	0.0 ppm	0.0 ppm	0.0 ppm

Figure: 25 TAC §265.306(d)

pH Levels	Minimum	Ideal	Maximum
pH	Not less than 7.0	7.4 – 7.6	7.8

§265.307. Inspections and Permitting of Public Interactive Water Features and Fountains .

(a) A county, municipality, or the department may:

(1) require that the owner or operator of a public interactive water feature and fountain (PIWF) obtain a permit for operation of the water feature or fountain; and

(2) inspect a PIWF for compliance with this subchapter.

(b) A department or local regulatory representative, upon presenting credentials, shall have the right to enter at all reasonable times any area or environment, including but not limited to the PIWF facility, building, storage area, equipment room, or office area to investigate for compliance with these sections, to review records, to question any person, or to locate, to identify, and to assess the condition of the PIWF facility and any other water body or water feature described in §265.301(b) of this title (relating to General Provisions).

(c) Advance notice or permission for inspections or investigations by the department or local regulatory authority is not required.

(d) A department or local regulatory representative shall not be impeded or refused entry in the course of the representative's official duties by reason of any state or federal law or

company policy. It is a violation of the Act for a person to interfere with, deny, or delay an inspection or investigation conducted by a department or local regulatory representative.

(e) A county, municipality or the department may impose and collect a reasonable fee in connection with a permit or inspection requirement.

(f) If a county or municipality imposes and collects a fee for a permit or inspection of a PIWF the following conditions shall be met:

(1) the auditor for the county or municipality shall review the program every 2 years to ensure that the fees imposed do not exceed the cost of the program; and

(2) the county or municipality shall refund the permit holders any revenue determined by the auditor to exceed the cost of the program.

§265.308. Closure of a Public Interactive Water Feature or Fountain.

(a) A county, a municipality, or the department may by order close, for the period specified in the order, a public interactive water feature or fountain (PIWF), if the operation of the PIWF:

(1) violates this subchapter; or

(2) violates a permitting or inspection requirement imposed under the Act, this subchapter, or as authorized by the Act or this subchapter.

(b) The closure order is effective immediately with or without notice and without a hearing to the PIWF owner/operator.

(c) If the order is issued under this section without a hearing, the department shall conduct a hearing no later than the 10th calendar day after the closure order to affirm, modify, or set aside the order.

(d) The hearing and appeal are governed by the department's rules in 25 Texas Administrative Code, Chapter 1, Subchapter B, regarding Formal Hearing Procedures, and Government Code, Chapter 2001.

(e) A PIWF shall be considered closed when the following conditions are met:

(1) a notice is posted at the public entrance of the PIWF notifying the public that the PIWF is closed; and

(2) water is shut off to all features of the PIWF.