

# Texas Administrative Code



## **Title 25 Health Services**

### **Part 1 Department of State Health Services**

### **Chapter 265 General Sanitation**

### **Subchapter M Public Interactive Water Features and Fountains**

### **§§265.301 – 265.308**

#### **§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 public interactive water features and fountains (PIWFs). These standards are based in part on the American National Standards Institute and International Aquatic Foundation Standards for Aquatic Recreation Facilities (ANSI/IAF-9 2005) as amended, the National Swimming Pool Foundation's 2008 "Aquatic Play Feature Handbook" as amended, the Centers for Disease Control and Prevention "Designing Public Swimming Facilities Guidelines," and the Centers for Disease Control and Prevention "Operating Public Swimming Pools Guidelines" both available at <http://www.cdc.gov/healthyswimming/>.

(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 water feature or a pool.

(2) A PIWF that is supplied entirely by drinking water that is not recirculated is not subject to §265.303(d) and §265.303(f) of this title (relating to Operation and Maintenance of Public Interactive Water Features and Fountains); §265.305 (relating to Circulation and Disinfectant Systems for Public Interactive Water Features and Fountains), and §265.306 of this title (relating to Water Quality at Public Interactive Water Features and Fountains).

(3) 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.

(4) A PIWF with water reservoirs or basins that are accessible to users may be subject to the suction device requirements of Chapter 265, Subchapter L of this title (relating to Standards for Public Swimming Pools and Spas).

(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) American Society of Sanitary Engineering (ASSE)--International Office, 901 Canterbury, Suite A, Westlake, Ohio 44145, telephone (440) 835-3040, website: [www.asse-plumbing.org](http://www.asse-plumbing.org).

(3) ANSI--American National Standards Institute, 25 West 43rd Street (4th Floor), New York, New York 10036, telephone (212) 642-4900, website: [www.ansi.org](http://www.ansi.org).

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

(5) AquaTech--Starfish Aquatics Institute, Human Kinetics Aquatic Education Center, P.O. Box 5076, Champaign, Illinois, 61825-5076, telephone (800) 747-4457, website: [www.aquaticeducationcenter.com](http://www.aquaticeducationcenter.com).

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

(7) ASPSA--American Swimming Pool and Spa Association, 1108 Little River Drive, Elizabeth City, North Carolina 27909, telephone (252) 331-2301, website: [www.swimmingpooloperator.com](http://www.swimmingpooloperator.com).

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

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

(10) 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 (20) "Cross-connection control device.")

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

(12) Bromine--A chemical element ( $\text{Br}_2$ ) 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.

(13) CDC--Centers for Disease Control and Prevention, 1600 Clifton Road, Atlanta, Georgia 30333, telephone (800) 232-4636, website: [www.cdc.gov](http://www.cdc.gov).

(14) Chlorine--A chemical element ( $\text{Cl}_2$ ) 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.

(15) 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.

(16) Circulation equipment--The 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.

(17) Circulation system--An arrangement of 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.

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

(19) 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 chlorine.

(20) 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 (10) "Backflow prevention device.")

(21) 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.

(22) 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.

(23) Date of construction--The date a building permit for construction of a PIWF is issued by a municipality or county. If no building permit is required, the date excavation or electrical service to the PIWF begins, whichever is first.

(24) 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](http://www.dshs.state.tx.us).

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

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

(27) 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.

(28) Extensively remodeled--Replacement of facility components or modification of the PIWF so that the design, configuration, capacity, or operation is 20% or more different from the original design, configuration, capacity, or operation. This term does not include the normal maintenance and repair of a PIWF or a water circulation system or the partial replacement of circulation system equipment if the size, type, or operation of the equipment is not substantially different from the original equipment. Replacement of 30% or more of the circulation system shall fall within the meaning of extensively remodeled.

(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 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) Incidental water contact--Contact with water that is accidental and/or that occurs merely by chance. For purposes of this subchapter, incidental water contact at a water feature or attraction is contact that occurs primarily when users do not expect to become completely wetted, immersed, or submerged in water and the water feature or attraction is not designed to completely wet users or to allow for immersion or submersion in water, and is not used by users who become completely wetted, immersed, or submerged in water when using the water feature or attraction.

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

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

(36) mJ/cm<sup>2</sup>--Millijoules per centimeter squared.

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

(38) 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](http://www.nsf.org).

(39) 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.

(40) NSPF--National Swimming Pool Foundation, 4775 Granby Circle, Colorado Springs, Colorado 80919-3131, telephone (719) 540-9119, website: [www.nspf.com](http://www.nspf.com).

(41) ONPG-MUG--Ortho-nitrophenyl-beta-D-galactopyranoside-4-methylumbelliferyl-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.

(42) Owner or operator--The owner of the property upon which the PIWF is located, or the 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 or operator is responsible to ensure that the PIWF complies with state and local standards.

(43) Ozone (O<sub>3</sub>)--A gas composed of oxygen that is generated on site and used to oxidize organic matter in water.

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

(45) 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).

(46) 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.

(47) Pool--For purposes of this subchapter, the term shall have the meaning assigned to it in Subchapter L, §265.182 of this title (relating to Definitions).

(48) Potable water--Water that meets all applicable standards for an approved drinking water source of the Texas Commission on Environmental Quality (TCEQ), 30 Texas Administrative Code (TAC), Chapter 290, Public Drinking Water, Subchapter D, Rules and Regulations for Public Water Systems, as amended, and 30 TAC Chapter 290, Public Drinking Water, Subchapter F, Drinking Water Standards Governing Drinking Water Quality And Reporting Requirements For Public Water Systems, as amended, or the equivalent

(49) Public interactive water feature and fountain (PIWF)--Any indoor or outdoor installation maintained for public recreation 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. PIWFs:

(A) may be stand-alone PIWFs or may share a water supply, disinfection system, filtration system, circulation system, or other treatment system that allows water to co-mingle with a pool;

(B) may be publicly or privately owned;

(C) may be operated by an owner, lessee, operator, licensee, or concessionaire, regardless of whether a fee is charged for use;

(D) include, but are not limited to, interactive water features or fountains that are 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;

(E) do not include interactive water features or fountains 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 are intended for use by not more than two resident families and their guests; and

(F) are not fountains, installations, amusement rides, or other attractions, whether decorative or interactive, in which only incidental water contact occurs.

(50) 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.

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

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

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

(54) 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.

(55) Stand-alone PIWF--A PIWF that does not share a water supply, disinfection system, filtration system, circulation system, or any other treatment system that allows water to co-mingle with a pool as defined in Subchapter L, §265.182 of this title. This does include a PIWF that shares a water supply, disinfection system, filtration system, circulation system, or any other treatment system that allows water to co-mingle with any other water feature other than a pool as defined in Subchapter L, §265.182 of this title.

(56) TCEQ--Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, telephone (512) 239-1000, website: [www.tceq.state.tx.us](http://www.tceq.state.tx.us).

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

(58) 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.

(59) Turnover rate--The period of time (usually in hours) required to circulate a volume of water equal to the total pool and PIWF water volume, or in the case of a stand-alone PIWF, the PIWF water volume, through the filtration equipment.

(60) 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.

(61) United States Environmental Protection Agency (EPA)--Ariel Rios Building, 12000 Pennsylvania Avenue, N.W., Washington, DC 20450, telephone (202) 272-0167, website: [www.epa.gov](http://www.epa.gov).

(62) 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.

### **§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. The 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 the entrance of all PIWFs, or where the signs are clearly visible to users entering the PIWF area before contact with PIWF water occurs, when the PIWF is open or in use. Signs 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 in letters at least 2 inches in height:

(1) "Non-Service Animals Prohibited";

(2) "Changing Diapers Within 6 Feet Of The Water Feature is Prohibited;"

(3) "Use Of The Water Feature If Ill With A Contagious Disease is Prohibited";

(4) "Do Not Drink Water From The Water Feature"; and

(5) "Use Of The Water Feature When Ill With Diarrhea is Prohibited."

(e) PIWFs without an on-site owner or operator. At PIWFs without an on-site owner or 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, when kept on site, shall be made available during inspection by the regulatory authority. If the records are kept in a separate location off site they shall be provided to the regulatory authority within 5 working days following the inspection:

- (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));
- (8) documentation that the turnover rates meet the requirements as described in §265.305(c) of this title;
- (9) documentation of any *Cryptosporidium* testing required by this subchapter;
- (10) documentation of supplemental water treatment conducted as required in §265.308(f) of this title (relating to Closure of a Public Interactive Water Feature and Fountain); and
- (11) documentation of the date of construction of the PIWF.

#### **§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 potable water.

(b) Water distribution system. All portions of the water distribution system serving a PIWF shall be protected against backflow and back siphonage. For purposes of these rules, this means a high hazard preventer such as a reduced-pressure-principle backflow preventer meeting the requirements of American Society of Sanitary Engineering ASSE Standard 1013 2009, as amended, and approved for use in potable water systems possibly subjected to backsiphonage or high backpressure. An air-gap designed to ASME Standard A112.1.2 is an acceptable high-hazard backflow preventer. 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) Hose bibs. Hose bibs shall be protected with a vacuum beaker.

(d) 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 rate. The turnover rate for the circulation of water in a PIWF that is combined or circulated with water from a pool shall be the same as the pool. The turnover rate for circulation of water in a stand-alone PIWF shall meet the following requirements.

(1) If the PIWF was constructed prior to May 1, 2010, the turnover rate shall meet the minimum design turnover rate for that PIWF.

(2) If the PIWF is constructed or extensively remodeled on or after May 1, 2010 the minimum turnover rate 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) constructed prior to May 1, 2010, shall be equipped with equipment capable of maintaining chemical levels as required in subsection (c) of this section, referring to disinfection and cyanuric acid levels, and subsection (d) of this section, referring to pH, at all times the PIWF is open.

(b) PIWFs constructed or extensively remodeled on or after May 1, 2010, shall be equipped with automatic disinfectant and pH feed equipment that provides continuous and effective disinfection and maintains the required pH at all times the PIWF is open. 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)

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: Out-of-Door Facilities Only	0.0 ppm	0.0 ppm	1.5 ppm
Combined Chlorine: Indoor Facilities Only	0.0 ppm	0.0 ppm	0.5 ppm
Cyanuric Acid (Stabilizer) – Out-of-Door Facilities Only	0.0 ppm	20 ppm	50 ppm
Cyanuric Acid (Stabilizer) – Indoor Facilities	0.0 ppm	0.0 ppm	0.0 ppm

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

Figure: 25 TAC §265.306(d)

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

(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);

(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 this section, and except as provided in subsections (j) and (l) of this section, PIWFs shall be equipped with a supplemental water treatment system that will protect the public against infection by the parasite, *Cryptosporidium*.

(1) Supplemental water treatment systems for a PIWF include:

(A) UV light disinfection installed after filtration;

(B) ozone;

(C) a NSF/ANSI-50 product, combination of products, or process to control *Cryptosporidium*; or

(D) weekly hyperchlorination following the Center for Disease Control's Recommendations for Aquatics Operators of Treated Venues "Hyperchlorination to Kill *Cryptosporidium*" available on the CDC's website: [www.cdc.gov/healthyswimming/](http://www.cdc.gov/healthyswimming/); or

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

(2) Except as provided in subsections (j) and (l) of this section, water from a PIWF shall not be combined or circulated with water of other water features or pools unless:

(A) all of the water either into or from the PIWF is treated with a supplemental water treatment system prior to combining or circulating with water from other water features or pools; or

(B) all of the water in the other water features or pools that is combined or circulated with water from the PIWF is treated with a supplemental water treatment 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 40mJ/cm<sup>2</sup> 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, available at: [http://www.epa.gov/safewater/mdbp/alternative\\_disinfectants\\_guidance.pdf](http://www.epa.gov/safewater/mdbp/alternative_disinfectants_guidance.pdf).

(j) Operators of stand-alone PIWFs constructed prior to May 1, 2010, in addition to maintaining sanitizer, cyanuric acid, and pH levels as required in this section shall:

(1) implement a supplemental water treatment system that will protect the public against infection by the parasite, *Cryptosporidium*; or

(2) test the water of the PIWF for *Cryptosporidium* every 14 days during operation.

(k) Operators of stand-alone PIWFs constructed or extensively remodeled after May 1, 2010 shall, in addition to maintaining sanitizer, cyanuric acid, and pH levels as required in this section, implement a supplemental water treatment system that will protect the public against infection by the parasite, *Cryptosporidium*.

(l) Operators of all PIWFs constructed prior to May 1, 2010, and that share a water supply, disinfection system, filtration system, circulation system or any other treatment system that allows water to co-mingle with a pool, in addition to maintaining sanitizer, cyanuric acid, and pH levels as required in this section shall:

(1) implement a supplemental water treatment system that will protect the public against infection by the parasite, *Cryptosporidium*; or

(2) test the water of the PIWF for *Cryptosporidium* every 30 days during operation.

(m) Operators of all PIWFs constructed or extensively remodeled after May 1, 2010, and that share a water supply, disinfection system, filtration system, circulation system, or any other treatment system that allows water to co-mingle with a pool, shall in addition to maintaining sanitizer, cyanuric acid, and pH levels as required in this section implement a supplemental water treatment system that will protect the public against infection by the parasite, *Cryptosporidium*.

(n) 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 or 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.

(o) When a PIWF is open for use, tests for chlorine or bromine levels and pH shall be conducted to comply with the following:

(1) If the PIWF is equipped with automatic disinfectant and pH feed equipment that provides continuous and effective disinfection and maintains the required pH, and that system continually monitors and automatically controls chlorine or bromine levels and pH, testing for chlorine or bromine and pH of the PIWF water shall be conducted at least once during each day the PIWF is in operation.

(2) If the PIWF is not equipped with automatic disinfectant and pH feed equipment that provides continuous and effective disinfection and maintains the required pH and that continually monitors and automatically controls chlorine or bromine levels and pH, testing for chlorine or bromine and pH of the PIWF water shall be conducted at least twice a day, once immediately prior to opening the PIWF and once midway through the period of time it is open for use, during each day the PIWF is in operation.

(3) Tests for cyanuric acid levels shall be conducted at least once every 7 days of operation when chlorine containing stabilizer is in use.

(p) Records of all testing performed at a PIWF shall be kept for 2 years and, if kept on site, shall be made available during inspection by the regulatory authority. If the records are kept in a separate location off site they shall be provided to the regulatory authority within 5 working days following the inspection.

(q) 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.

### **§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 or fountain (PIWF) obtain a permit for operation of the water feature or fountain;

(2) inspect a PIWF for compliance with this subchapter; and

(3) require that the PIWF is tested for *Cryptosporidium* when the illness Cryptosporidiosis is diagnosed in an individual that has used that PIWF.

(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

(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 and 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),

(1) the operation of the PIWF violates this subchapter;

(2) the operation of the PIWF violates a permitting or inspection requirement imposed under the Act, this subchapter, or as authorized by the Act or this subchapter; or

(3) the water in the PIWF tests positive for the presence of *Cryptosporidium*.

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

(f) When water from a PIWF tests positive for the presence of *Cryptosporidium* the owner or operator shall close the PIWF and notify the appropriate regulatory authority. The PIWF shall not reopen until:

(1) the PIWF is hyperchlorinated following the Center for Disease Control's (CDC) Recommendations for Aquatics Operators of Treated Venues "Hyperchlorination to Kill *Cryptosporidium*" available on the CDC's website: [www.cdc.gov/healthyswimming/](http://www.cdc.gov/healthyswimming/); and

(2) documentation verifying that proper hyperchlorination procedure was followed by methodology the same as or equivalent to the CDC's "Water Contamination Response Log" available at: [www.cdc.gov/healthyswimming/](http://www.cdc.gov/healthyswimming/) is supplied to the appropriate regulatory authority.