

**IOWA DEPARTMENT OF PUBLIC HEALTH**

**SPAS**

**Iowa Department of Public Health  
Division of Environmental Health  
Swimming Pool and Spa Program  
Lucas State Office Building  
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Des Moines, Iowa 50319-0075**

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# SPA RULES

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## SPAS

### **641--15.1(135I) Applicability.**

**15.1(1)** These rules apply to swimming pools, spas, wading pools, water slides, wave pools, spray pads, and bathhouses connected to swimming pools owned or operated by local or state government, or commercial interests or private entities including, but not limited to, public or private school corporations, hotels, motels, camps, apartments, condominiums, health clubs and country clubs. These rules do not apply to a residential swimming pool or spa that is permanently installed in a single-family dwelling, to a decorative fountain, or to a therapeutic swimming pool or spa which is under the direct supervision of qualified medical personnel.

**15.1(2)** These rules do not apply to a swimming pool or spa operated by a homeowners association representing 72 or fewer dwelling units if the association bylaws, which also apply to a rental agreement relative to any of the dwelling units, include an exemption from the requirements of this chapter, provide for inspection of the swimming pool or spa by an entity other than the department or a local inspection agency, and assume any liability associated with operation of the swimming pool and spa. The association shall notify the department in writing if the association bylaws are amended as above. The inspector designated by the association shall be a certified operator as defined in 15.3(1). A report of the inspection shall be filed with the association secretary and shall be available to any association member on request.

**641--15.2(135I) Scope.** These rules stipulate minimum safety and water quality requirements for the operation of swimming pools and spas; standards for construction; procedures for registration; qualifications for swimming pool and spa inspectors; qualifications for swimming pool and spa operators and lifeguards; and procedures for health departments to provide for the inspection of swimming pools and spas and enforcement of these rules. Swimming pools and spas which are in compliance with these rules must also comply with the requirements of any other applicable federal, state or local laws, rules or ordinances.

### **641--15.3(135I) Definitions and abbreviations.**

#### **15.3(1) Definitions.**

“Air break” is a piping arrangement in which a drain from a fixture, appliance or device discharges indirectly into a fixture, receptacle, or interceptor at a point below the flood-level rim of the receptacle.

“Air gap” means the unobstructed vertical distance through the free atmosphere between the lowest opening from an inlet pipe and the flood-level rim of a receptacle or floor drain.

“Board of health” means a county, city, or district board of health.

“Body feed” means the continuous addition of controlled amounts of filtering aid during the operation of a diatomaceous earth filter to maintain a permeable filter cake. This is sometimes referred to as a "slurry feed."

“Certified operator” means a person who has:

1. Successfully completed the Certified Pool/Spa Operator<sup>®</sup> course sanctioned by NSPF, the Aquatic Facility Operator course sanctioned by NRPA, the Professional Pool & Spa Operator course sanctioned by the APSP, the Licensed Aquatic Facility Technician course sanctioned by

the American Swimming Pool and Spa Association, or an equivalent course approved by the department; and

2. Been recertified as required by the sanctioning organization; and
3. Obtained the continuing education required by 15.11(2).

“Combined chlorine” means nitrogen-chlorine compounds formed by the reaction of a chlorine disinfectant chemical with ammonia and organic nitrogen compounds as measured with a DPD (diethyl-p-phenylene diamine) test kit or as measured by another method approved by the department. Another term for combined chlorine is “chloramines.”

“Construction” means the installation of a new swimming pool facility. “Construction” includes modifications to an existing facility which change the total recirculated water volume or the total water surface area by 20 percent or more.

“Deck” means a walkway immediately adjacent to a swimming pool.

“Decorative fountain” means a basin equipped with water sprays or jets that does not serve primarily as a wading or swimming pool and whose drain is not directly connected to any type of suction device for removing or recirculating the water.

“Deep water” means those areas of a swimming pool where the water is more than five feet deep.

“Department” means the Iowa department of public health.

“Di-chlor” means sodium dichloro-s-triazinetrione dihydrate. Di-chlor is a form of chlorine that includes cyanuric acid in its formulation.

“Engineering plans” means plans and specifications certified in accordance with the rules of the engineering and land surveying examining board or the architectural examining board by an engineer or architect licensed to practice in the state of Iowa.

“Equalizer” means an arrangement including a pipe from an opening below the water level in a swimming pool or spa to the body of a skimmer and a normally closed valve at the skimmer body. The arrangement is designed to automatically prevent air from being drawn into the pump when the water level drops below the skimmer inlet. The equalizer opening in a swimming pool or spa is a fully submerged outlet.

“Facility” means a building, fenced enclosure, or lot where there is at least one swimming pool or spa subject to regulation under Iowa Code chapter 135I and these rules.

“Field fabricated,” when applied to a sump or a cover/grate for a fully submerged outlet, means constructed on site with conventional building materials or of a size and shape different from readily available commercial sumps or cover/grates.

“Fill and drain wading pool” means a wading pool having no recirculation system.

“Filter” means a mechanical device for removing suspended particles from the swimming pool water and refers to the complete mechanism including all component parts.

“Flow rating” when applied to the cover/grate for a fully submerged outlet means the maximum flow rate in gpm through the cover/grate that will not cause body or hair entrapment as determined by the test methods in the ASME standard.

“Fountain” means a water fountain that is not established primarily for swimming or wading, but where swimming or wading is allowed, and that has a drain which is connected to a mechanical suction device for removing or recirculating the water.

“Free chlorine” means the concentration of hypochlorous acid and hypochlorite ion in the swimming pool water as measured with a DPD (diethyl-p-phenylene diamine) test kit or as measured by another method approved by the department.

“Fully submerged outlet” means an outlet that is completely under water when the water is at the normal operating level.

“Gravity outlet” means an outlet that directly connects to a tank or other structure that is at atmospheric pressure. Water flows through a gravity outlet by the natural head of water over the outlet.

“Hose bib” means a fresh-water outlet that is threaded to permit the attachment of a garden hose.

“Hydrostatic relief valve” means a relief valve installed in the bottom of the swimming pool and designed to operate automatically when the swimming pool is empty, relieving the groundwater pressure around the structure by allowing the groundwater into the swimming pool tank.

“Inlet” means a fitting or opening through which recirculation water enters the swimming pool.

“Inspection agency” means the department, or a city, county or district board of health that has executed with the department pursuant to the authority of Iowa Code chapters 28E and 135I an agreement to inspect swimming pool/spa facilities and enforce these rules. The authority of a city, county or district board of health is limited to the geographic area defined in the agreement executed with the department. Within the defined geographic area, the city, county or district board of health is the “local inspection agency.”

“Leisure river” means a closed-path channel of near constant depth with a river-like flow of water. A leisure river may include water features and play devices. Leisure rivers are also called “lazy rivers” or “slow rivers.”

“Lifeguard.”

1. “Certified lifeguard” means an individual who holds current certification in one of the following courses and, where applicable, current additional certification in American Red Cross first aid and American Red Cross or American Heart Association infant, child and adult CPR; two-person CPR, or equivalent first-aid and CPR certification approved by the department:

- American Red Cross Lifeguard Training
- YMCA Lifeguarding
- Boy Scouts of America Lifeguard

2. “Licensed lifeguard” means an individual who holds a current license from the National Pool and Waterpark Lifeguard Training Program in one of the following programs:

- National Pool and Waterpark Pool Lifeguard

- National Pool and Waterpark Lifeguard Training
- National Pool and Waterpark Deep Water Lifeguard

NOTE: Lifeguard, CPR and first-aid training programs will sometimes be renamed or restructured by the sponsoring organization. American Red Cross lifeguard training now includes first aid and CPR; the lifeguard receives the lifeguard certificate and a CPR certificate. Separate CPR and first-aid training is available from the American Red Cross, the American Heart Association, and other providers. If there is a question whether a specific training course will meet the requirements of these rules, information about the course should be submitted to the department for evaluation.

“Main drain” means the outlet(s) at the deepest part of a swimming pool or spa.

“Manufacturer's specifications” means written guidelines established by a manufacturer for the installation and operation of the manufacturer's equipment.

“Multisection water recreation pool” means a swimming pool with three or more distinct use areas such as, but not limited to, a zero-depth play area, a water slide landing area, a lap swim area, and a diving area.

“Outlet” means a fitting or opening, including the main drain, through which water leaves the swimming pool or spa.

“Outlet system” means an arrangement of components associated with one or more connected fully submerged outlets including the cover/grate(s), the sump(s), the piping, and the pump(s) if one or more pumps are directly connected to the outlet(s).

“Perimeter overflow gutter” means a weir and trough around the perimeter of a swimming pool that is used to skim the surface of the water and return the water to the treatment system.

“Plunge pool” means a pool designed to serve as a landing area for a water slide.

“Recirculation system” means the pump(s), piping, inlets, outlets, filtration system, chemical feed systems and accessories provided to convey and treat the swimming pool or spa water to meet the water quality standards in these rules.

“Reconstruction” means the replacement or modification of a swimming pool or spa shell or deck, a swimming pool or spa recirculation system, a perimeter overflow gutter or skimmer, or a bathhouse associated with a public swimming pool or spa. “Reconstruction” does not include the replacement of equipment or piping previously approved by the department, provided that the type and size of the equipment are not revised, nor does it include normal maintenance or repair.

“Residential swimming pool” means any swimming pool that is used, or intended to be used, in connection with a single-family residence and that is available only to the family of the householder and the householder’s private guests. A residential swimming pool used for any commercial purpose, including, but not limited to, swimming lessons or exercise classes, shall comply with the requirements of 15.4(6)“n.” A residential swimming pool used for commercial purposes for more than 60 hours in a calendar month shall be considered a public swimming pool.

“Shallow water” means those areas of a swimming pool where the water is 5 ft deep or less.

“Shallow water guard.”

1. “Certified shallow water guard” means a person who has current certification in American Red Cross basic water rescue, current certification in American Red Cross first aid, and current certification in American Red Cross or American Heart Association infant, child and adult CPR, or equivalent training approved by the department.

2. “Licensed shallow water guard” means a person who holds a current license from the National Pool and Waterpark Lifeguard Training Program as a National Pool and Waterpark Shallow Water Waterpark Lifeguard.

NOTE: Water safety, CPR and first-aid training programs will sometimes be renamed or restructured by the sponsoring organization. If there is a question whether a specific training course will meet the requirements of these rules, information about the course should be submitted to the department for evaluation.

“Skimmer” means a manufactured device designed to be directly connected to the recirculation pump suction and used to skim the swimming pool over a self-adjusting weir.

“Spa” means a structure, chamber, or tank, such as a hot tub or whirlpool, that is designed for recreational or therapeutic use and is designed not to be drained, cleaned, and refilled after each individual use. A spa is designed to provide a means of agitation. A swimming pool with a bench equipped with agitation is not considered a spa provided that the bench length is no more than 10 percent of the swimming pool perimeter and that the water temperature is maintained at 90°F or less. Rules 15.51(135I) and 15.52(135I) define minimum standards for the operation and design of spas.

“Speed slide” means a water slide which is designed to enter users into a plunge pool or other deceleration arrangement at a speed of 30 ft per second or more.

“Spray pad” means a constructed area equipped with water sprays or other water play features where the water is intended to contact the users. A spray pad includes no standing water. A spray pad uses water that is recirculated independently or from an associated swimming pool. Spray pads are also called “wet decks,” “splash pads,” “interactive play attractions,” “water recreation attractions,” and other names.

A play area with sprays or other features that includes no standing water and that uses only potable water that is not circulated (the water drains to waste) is not included in this definition.

“Suction outlet” means an outlet that is directly connected to the inlet side of a circulation pump.

“Superchlorination” means the addition of a chlorine disinfectant compound to a swimming pool or spa to a concentration at least ten times the combined chlorine concentration before the addition. Treatment of swimming pool or spa water with nonchlorine chemicals to eliminate or suppress combined chlorine is not superchlorination.

“Swimming pool” means a structure, chamber, tank, or area constructed of man-made material through which water is circulated and that is designed and operated for recreation,

training, or competition that includes full body contact with the water. This definition includes, but may not be limited to, swimming pools, wading pools, spray pads, leisure rivers, water slides, and wave pools. The swimming pool may be either publicly or privately owned. This definition includes, but is not limited to, swimming pools operated by cities, counties, public and private schools, hotels, motels, camps, apartments, condominiums, and health clubs and country clubs.

1. "Class A swimming pool" means a swimming pool with a water surface area of 1500 ft<sup>2</sup> or more, except for wading pools.

2. "Class B swimming pool" means a swimming pool with a water surface area of less than 1500 ft<sup>2</sup>.

"Swimming pool slide" means any device used to enter a swimming pool by sliding down an inclined plane or through a tube. "Swimming pool slide" as used in this chapter is equipment generally similar to a playground slide. A swimming pool slide shall have a slide path of 20 ft or less in length and a water flow down the slide of 20 gpm or less. A slide exceeding either of these criteria shall be a water slide.

"Temporary spa" means a spa which is installed or situated in one location for a period of less than 30 days.

"Total bromine" means the concentration of hypobromous acid, hypobromite ion and nitrogen-bromine compounds in the swimming pool water as measured with a DPD (diethyl-p-phenylene diamine) test kit or as measured by another method approved by the department.

"Tri-chlor" means trichloro-s-triazinetriene. Tri-chlor is a form of chlorine that includes cyanuric acid in its formulation.

"Unblockable," when applied to a cover/grate for a fully submerged outlet, means a size and shape that cannot be fully covered by an 18-inch by 23-inch mat with 4-inch-diameter rounded corners and the differential pressure generated by the flow through the uncovered open area is not enough to cause body entrapment. "Unblockable" is evaluated by the methods specified in the ASME standard.

"Wading pool" means a swimming pool that is no more than 24 inches deep at any point and that is primarily intended for use by young children for general recreation or training.

"Water slide" means a recreational ride which is a sloped trough-like or tubular structure using water as a lubricant and as a method of regulating rider velocity and which terminates in a plunge pool, swimming pool, or in a specially designed deceleration structure. "Water slide" includes appurtenant structures and devices, such as a plunge pool, pump reservoir, recirculation equipment, flume pumps, and access structures, when they are provided.

"Wave pool" means a swimming pool of special shape and design which is provided with wave-generating equipment.

"Zero-depth pool" means a swimming pool in which the pool floor intersects the water surface along at least one side of the pool. This definition does not include wading pools.

### **15.3(2) Abbreviations.**

"AFO" means aquatic facility operator.

“AGA” means American Gas Association, 400 N. Capitol Street, NW, Washington, DC 20001.

“ANSI” means American National Standards Institute, 25 West 43rd Street, New York, NY 10036.

“APSP” means the Association of Pool & Spa Professionals (formerly National Spa and Pool Institute (NSPI)), 2111 Eisenhower Avenue, Alexandria, Virginia 22314.

“ASME” means American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990.

“ASME standard” means ASME/ANSI A112.19.8a-2008, “Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs.” The standard sets performance requirements and test methods for pool and spa fittings, covers and grates for physical strength, ultraviolet light resistance, and hair and body entrapment prevention. The standard can be purchased from ANSI by calling (212)642-4980 or at <http://webstore.ansi.org/>.

“AWWA” means American Water Works Association, 6666 West Quincy Avenue, Denver, CO 80235.

“BTU” means British thermal unit.

“CPO<sup>®</sup>” means certified swimming pool/spa operator.

“CPR” means cardiopulmonary resuscitation.

“feet” means feet of water ( $\text{feet} \times 0.43 = \text{psi}$ ) when used in discussing pump requirements.

“ft” means foot or feet (distance).

“ft<sup>2</sup>” means square foot or square feet.

“gal” means gallon(s).

“gpm” means gal per minute.

“in Hg” means inches of mercury ( $\text{in Hg} \times 0.49 = \text{psi}$ ).

“in<sup>2</sup>” means square inch(es).

“LAFT” means licensed aquatic facility technician.

“mg/L” means milligram(s) per liter.

“mV” means millivolts.

“NRPA” means National Recreation and Park Association, 22377 Belmont Ridge Road, Ashburn, VA 20148.

“NSF” means NSF International (formerly National Sanitation Foundation), 789 N. Dixboro Road, P.O. Box 130140, Ann Arbor, MI 48113-0140.

“NSPF<sup>®</sup>” means National Swimming Pool Foundation, 4775 Granby Circle, Colorado Springs CO 80919

“ORP” means oxidation-reduction potential.

“ppm” means parts per million; mg/L and ppm are equivalent terms.

“PPSO” means professional pool and spa operator.

“psi” means pounds per square inch.

“sec” means second (time).

“Standard 50” means NSF/ANSI Standard 50, “Circulation System Components for Swimming Pools, Spas, or Hot Tubs.”

“TDH” means total dynamic head.

“UL” means Underwriters Laboratories, 333 Pfingsten Road, Northbrook, IL 60062-2096.

## **SPA OPERATIONS**

**641--15.51(135I) Spa operations.** A spa shall be operated in a safe, sanitary manner and shall meet the following operational standards.

### **15.51(1) Filtration and recirculation.**

a. Filters. A spa shall have a filtration system in good working condition which provides water clarity in compliance with the water quality standards of subrule 15.51(2).

(1) Each filter cartridge shall be replaced with a new, unused, or cleaned and disinfected filter cartridge in accordance with the manufacturer’s recommendations for pressure rise at the inlet of the filter, but at least once a month. If a functioning pressure gauge is not present at the filter inlet, the filter cartridge(s) shall be replaced whenever the spa is drained and at least every two weeks. Filter cartridge replacements shall be recorded in the spa records.

(2) Each sand filter serving a spa shall be opened at least annually and the sand media examined for grease buildup, channeling and other deficiencies. The sand shall be cleaned and disinfected before the filter is put back into service. The annual inspection shall be recorded in the spa records.

(3) Each diatomaceous earth filter serving a spa shall be dismantled, and the filter socks and the interior of the filter shall be cleaned and disinfected at least annually. The annual cleaning shall be recorded in the spa records.

(4) The recirculation system shall have an operating pressure gauge located in front of the filter if it is a pressure filter system. A vacuum filter system shall have a vacuum gauge located between the filter and the pump.

b. The recirculation system for a spa shall treat one spa volume of water in 30 minutes or less.

c. Continuous operation required. Pumps, filters, disinfectant feeders, flow indicators, gauges, and all related components of the spa water recirculation system shall be operated continuously whenever the spa contains water, except for cleaning or servicing.

d. Inlets. The recirculation system shall have inlets adequate in design, number, location, and spacing to ensure effective distribution of treated water and maintenance of uniform disinfectant residual throughout the spa.

e. Skimmers. A spa shall have at least one skimmer.

(1) Each skimmer shall have a self-adjusting weir in place and operational.

(2) Each skimmer shall have an easily removable basket or screen upstream from any valve.

f. Wastewater. Wastewater and backwash water from a spa shall be discharged through an air break or an air gap.

g. Water supply. The water supplied to a spa shall be from a water supply meeting the requirements of the department of natural resources for potable water.

(1) Water supplied to a spa shall be discharged to the spa system through an air gap or a reduced-pressure principle backflow device meeting AWWA C-511-97, "Reduced-Pressure Principle Backflow-Prevention Assembly."

(2) Each hose bib at a facility shall be equipped with an atmospheric vacuum breaker or a hose connection backflow preventer.

h. Spa water heaters.

(1) Electric water heaters shall bear the seal of UL.

(2) Gas-fired water heaters shall bear the seal of the AGA and shall be equipped with a pressure relief valve.

(3) Fuel-burning water heaters shall be vented to the outside, in accordance with the Iowa state plumbing code.

(4) Each indoor swimming pool equipment room with fuel-burning water heating equipment shall have one or more openings to the outside of the room for the provision of combustion air.

#### **15.51(2) Water quality and testing.**

a. Disinfection.

(1) Spa water shall have a free chlorine residual of at least 2.0 ppm and no greater than 8.0 ppm, or a total bromine residual of at least 4.0 ppm and no greater than 18 ppm when the spa is open for use, except as given in Table 12.

(2) A spa shall be closed if the free chlorine is measured to be less than 1.0 ppm or the total bromine is measured to be less than 2.0 ppm.

(3) The spa shall be closed if a free chlorine measurement exceeds 8.0 ppm or if the total bromine measurement exceeds 18 ppm, except as given in Table 12.

(4) If an ORP controller with a readout meeting the requirements of 15.51(2)“f”(4) is installed on the spa system, the spa water shall have an ORP of at least 700 mV, but no greater than 880 mV, except as given in Table 12. The spa shall be closed if the ORP is less than 650 mV or greater than 880 mV.

(5) The spa shall be closed if the cyanuric acid concentration in the spa water exceeds 80 ppm. The spa may be reopened when the cyanuric acid concentration is 40 ppm or less.

(6) No cyanuric acid shall be added to an indoor spa after May 4, 2005, except through an existing chemical feed system designed to deliver di-chlor or tri-chlor. No cyanuric acid in any form shall be added to an indoor spa after June 30, 2008.

Table 12

| Preferred Operating Range |               |                | Acceptable Operating Range |               |                |
|---------------------------|---------------|----------------|----------------------------|---------------|----------------|
| ORP (mV)                  | Free Cl (ppm) | Total Br (ppm) | ORP (mV)                   | Free Cl (ppm) | Total Br (ppm) |
| 700-880                   | 2.0-8.0       | 4.0-18.0       | 700-880                    | 1.0-1.8       | 2.0-3.5        |
|                           |               |                | 650-700 <sup>#</sup>       | 2.0-8.0       | 4.0-18.0       |
|                           |               |                | 650-700 <sup>†</sup>       | 8.2-10.0      | 18.5-22.0      |

# If these conditions occur on any 3 consecutive days or on any 5 days within a 7-day period, and the conditions reoccur after the spa is drained and cleaned, the facility management shall evaluate water parameters including, but not limited to, cyanuric acid, pH, combined chlorine, and phosphates (ortho- and total); and other conditions at the spa. The facility management shall modify parameters and conditions as practical to bring the ORP to a minimum of 700 mV. The evaluation shall be completed within 30 days after the low ORP condition is known to the facility management. A written report of the evaluation shall be kept with the spa records.

† If these conditions occur on any 2 consecutive days or on any 4 days within a 7-day period, the facility management shall drain and clean the spa and notify the local inspection agency. If the conditions reoccur after the spa is drained and cleaned, the facility management shall cause the conditions at the spa specified in the previous footnote and the function of the ORP equipment to be investigated by a professional pool service company. A written report detailing source water parameters, spa water parameters, spa design (including information about the installed mechanical and chemical equipment), other conditions affecting the disinfectant concentration and the ORP, and the actions taken to increase ORP relative to the disinfectant residual shall be submitted to the local inspection agency within 30 days after the low ORP condition is known to the facility management.

b. pH level. The pH of spa water shall be 7.2 to 7.8.

c. Water clarity. A spa shall be closed if the grate openings on drain fittings at or near the bottom of the spa are not clearly visible when the agitation system is off.

d. Bacteria detection.

(1) If coliform or *Pseudomonas aeruginosa* bacteria are detected in a sample taken in accordance with 15.51(2)“e”(8), the spa shall be drained, cleaned, and disinfected. The spa may reopen and a check sample shall be taken when the spa water meets the requirements of paragraphs “a”, “b” and “c” above. If coliform or *Pseudomonas aeruginosa* bacteria are detected in the check sample, the spa shall be closed. The spa shall be drained, physically cleaned, and disinfected. The filter(s) shall be cleaned and disinfected.

1. For cartridge filters, the cartridge shall be replaced with a new, unused cartridge or a cleaned, disinfected cartridge; the filter housing shall be physically cleaned, then disinfected.

2. For sand and DE filters, the filter shall be opened and the media and components cleaned and disinfected.

The spa may reopen when no coliform or *Pseudomonas aeruginosa* bacteria are detected in a spa water sample taken when the spa water meets the requirements of paragraphs “a,” “b” and “c” above.

(2) The facility management shall notify the local inspection agency of the positive bacteriological result within one business day after the facility management has become aware of the result.

e. Test frequency. The results of the tests required below shall be recorded in the spa records.

(1) The disinfectant residual in the spa water shall be tested or the ORP of the spa water shall be checked each day before the spa is opened for use and at intervals not to exceed two hours thereafter until the spa closing time. For a spa at a condominium complex, an apartment building or a homeowners association with 25 or fewer living units, the disinfectant level in the spa water shall be tested or the ORP of the spa water shall be checked at least twice each day the spa is available for use.

If the spa is equipped with an automatic controller with a readout or local printout of ORP complying with the requirements of 15.51(2)“f”(4), the operator may make visual readings of ORP in lieu of manual testing, but the spa water shall be tested manually for disinfectant residual at least twice per day. Both ORP and disinfectant residual shall be recorded when manual testing is done. The operator shall specify in the spa records which results are from the manual tests.

(2) The pH of the spa water shall be tested each day before the spa is opened for use and at intervals not to exceed two hours thereafter until the spa closing time. For a spa at a condominium complex, an apartment building or a homeowners association with 25 or fewer living units, the pH of the spa water shall be tested at least twice each day the spa is available for use.

If the spa is equipped with an automatic controller with a readout or local printout of pH complying with the requirements of 15.51(2)“f”(5), the operator may make visual readings of pH in lieu of manual testing, but the spa water shall be tested manually for pH at least twice per day. The operator shall specify in the spa records the results that are from the manual tests.

(3) The spa water temperature shall be measured whenever a manual test of the spa water is performed.

(4) If a chlorine compound is used for disinfection, the spa water shall be tested for combined chlorine at least once a day.

(5) If cyanuric acid or a stabilized chlorine is used in a spa, the spa water shall be tested for cyanuric acid at least once a day.

(6) The spa water shall be tested for total alkalinity each time the spa is refilled and at least once in each week that the spa is open for use.

(7) The spa water shall be tested for calcium hardness each time the spa is refilled.

(8) At least once in each month that a spa is open for use, a sample of the spa water shall be submitted to a laboratory certified by the department of natural resources for the determination of coliform bacteria in drinking water. The sample shall be analyzed for total coliform and *Pseudomonas aeruginosa*.

f. Test equipment.

(1) Each facility shall have functional water testing equipment for free chlorine and combined chlorine, or total bromine; pH; total alkalinity; calcium hardness; and cyanuric acid (if cyanuric acid or a stabilized chlorine is used at the facility).

(2) The test equipment shall provide for the direct measurement of free chlorine and combined chlorine from 0 to 10 ppm in increments of 0.2 ppm or less over the full range, or total bromine from 0 to 20 ppm in increments of 0.5 ppm or less over the full range.

(3) The test equipment shall provide for the measurement of spa water pH from 7.0 to 8.0 with at least five increments in that range.

(4) A controller readout used in lieu of manual disinfectant residual testing shall be a numerical analog or digital display (indicator lights are not acceptable) with an ORP scale with a range of at least 600 to 900 mV with increments of 20 mV or less.

(5) A controller readout used in lieu of manual pH testing shall be a numerical analog or digital display (indicator lights are not acceptable) with a range at least as required in 15.51(2)“F”(3) with increments of 0.2 or less over the full range.

g. Operator availability. A person knowledgeable in testing water and in operating the water treatment equipment shall be available whenever a spa is open for use.

**15.51(3) Disinfection systems and cleaning.**

a. Disinfectant system.

(1) Equipment for continuous feed of a chlorine or bromine compound to the spa water shall be provided and shall be operational. The equipment shall be adjustable in at least five increments over its feed capacity. Where applicable, the chemical feeder shall be listed by NSF or another listing agency approved by the department for compliance with Standard 50.

(2) The disinfectant equipment shall be capable of providing at least 10 ppm of chlorine or bromine to the spa water based on the recirculation flow rate.

(3) Equipment and piping used to apply any chemicals to the water shall be of such size, design, and material that they may be cleaned. All material used for such equipment and piping shall be resistant to the action of chemicals to be used.

(4) The use of chlorine gas is prohibited.

b. Cleaning and superchlorination.

(1) A spa shall be clean.

(2) A spa containing 500 gal of water or less shall be drained, cleaned and refilled a minimum of once a week. A spa containing over 500 gal to 2000 gal of water shall be drained, cleaned and refilled a minimum of one time every two weeks. A spa with a water volume greater than 2000 gal shall be drained, cleaned and refilled a minimum of one time every three weeks.

The department may permit a longer period between refills for spas over 2000 gal upon evaluation of the use of the spa. Such permission shall be in writing, and a copy shall be available to an inspector upon request.

(3) The inspection agency may require that a spa be drained, cleaned, and superchlorinated prior to further usage.

**15.51(4) Safety.**

a. Chemical safety.

(1) No disinfectant chemical, pH control chemical, algaecide, shock treatment chemical, or any other chemical that is toxic or irritating to humans shall be added to a spa over the top when the spa is occupied. If chemicals are added to the spa over the top, the spa shall not be occupied for a period of at least 30 minutes. The operator shall test the spa water as appropriate before allowing use of the spa. The chemical addition and the test results shall be recorded in the spa records.

(2) Spa chemicals shall be stored and handled in accordance with the manufacturer's recommendations.

(3) Material safety data sheets (MSDS) for the chemicals used in the spa shall be at the facility in a location known and readily accessible to the facility staff.

(4) Chemical containers shall be clearly labeled.

(5) A chemical hazard warning sign shall be placed at the entrance of a rooms where chemicals are used or stored or where bulk containers are located.

b. Stairs, ladders, recessed steps, and ramps.

(1) When the top rim of a spa is more than 24 inches above the surrounding floor area, stairs or a ramp shall be provided to the top of the spa.

(2) Stairs, ladders, ladder rungs, and ramps shall be slip-resistant.

(3) Where stairs and ramps are provided, they shall be equipped with a handrail.

(4) Ladders and handrails shall be constructed of corrosion-resistant materials or provided with corrosion-resistant coatings. They shall have no exposed sharp edges.

(5) Ladders, handrails and grabrails shall be securely anchored.

c. Water temperature. Water temperature in the spa shall not exceed 104°F. The spa shall be closed if the water temperature exceeds 104°F.

(1) A thermometer shall be available to measure temperatures in the range of 80° to 120°F.

(2) Water temperature controls shall be accessible only to the spa operator.

d. Emergency telephone. Each facility where lifeguards are not provided shall have a designated emergency telephone or equivalent communication system that can be operated without coins. The communication system shall be available to users of the spa whenever the spa is open. If the emergency communication system is not located within the spa enclosure, management shall post a sign(s) indicating the location of the emergency telephone. Instructions for emergency use of the telephone shall be posted near the telephone.

e. Water level. Water level shall be maintained at the skimming level.

f. Fully submerged outlets. Each fully submerged outlet shall be designed to prevent user entrapment. A spa shall be closed if the cover/grate of a fully submerged outlet is missing or broken.

(1) For a spa constructed prior to May 13, 1998, each pump that draws water directly from a fully submerged outlet shall be connected to two or more outlets or a single outlet with an area of at least 144 in<sup>2</sup>.

(2) Each fully submerged outlet shall have a cover/grate that has been tested for compliance with the requirements of the ASME standard by a testing agency approved by the department or that is certified for compliance by an engineer licensed in Iowa.

1. The cover/grate for an outlet system with a single fully submerged outlet shall have a flow rating of at least 100 percent of the maximum system flow rate. The combined flow rating for the cover/grates for an outlet system with more than one fully submerged outlet shall be at least 200 percent of the maximum system flow rate.

The maximum system flow rate is the design flow rate for the pump(s) directly connected to the outlet(s) in an outlet system. In the absence of better information, the maximum system flow rate is the capacity of the pump(s) at 50 feet TDH, based on the manufacturer's published pump curves.

2. Fully submerged outlet cover/grates shall not be removable without the use of tools.

3. Purchase records and product information that demonstrate compliance shall be maintained by the facility for at least five years from the time the cover/grate is purchased. If a field fabricated cover/grate is certified for compliance to the ASME standard by an engineer licensed in Iowa, a copy of the certification letter shall be kept at the facility for at least five years from the certification date.

(3) A spa with a single fully submerged outlet that is not unblockable and that is directly connected to a pump shall be closed if the outlet does not have a cover/grate that complies with the ASME standard.

If a spa has two or more fully submerged outlets on a single surface that are all less than 3 ft apart on center, are not unblockable, and are directly connected to a pump, the spa is considered to have a single fully submerged outlet.

(4) A spa with a single fully submerged outlet that is not unblockable and that is directly connected to a pump shall be closed if the outlet system is not equipped with a safety vacuum release system that is listed for compliance with ASME/ANSI A112.19.17-2002, "Manufactured Safety Vacuum Release Systems (SVRS) for Residential and Commercial Swimming Pool, Spa, Hot Tub, and Wading Pool Suction Systems," by a listing agency approved by the department; or another vacuum release system approved by the department.

1. Purchase records and product information that demonstrate compliance shall be maintained by the facility for at least five years from the time the SVRS is purchased or another approved system is installed.

2. An SVRS shall be installed in accordance with the manufacturer's instructions

3. An SVRS shall be tested for proper function at the frequency recommended by the manufacturer, but at least once in each month the spa is operated. The date and result of each test shall be recorded.

(5) In lieu of compliance with subparagraphs (2), (3) and (4) above, a fully submerged outlet in a spa may be disabled with the approval of the department, except that an equalizer in a skimmer may be plugged without department approval. The management of the spa shall submit to the department information including, but not necessarily limited to:

1. The area and volume of the spa;
2. Detailed information about the inlet system, including the location of the inlets and the type of inlet fitting;
3. The number of skimmers and pipe sizes;
4. Pump information and flow rates for the outlet system; and
5. Filter type, number of filters, the size of the filter(s), and whether multiple filters are backwashed together or separately.

If the department approves the application to disable the outlet, the outlet valve shall be closed and the valve secured by removing the handle, by locking the handle closed, or by another method approved by the department. The outlet may be physically disconnected from the pump system at the option of the facility management.

- g. Spa walls and floor shall be smooth and easily cleanable.
- h. Decks.
  - (1) The deck shall have a slip-resistant surface.
  - (2) The deck shall be clean and free of debris.
  - (3) A hose bib shall be provided for flushing or cleaning of the deck.
  - (4) Glass objects, other than eyeglasses and safety glass doors and partitions, shall not be permitted on the deck.
    - i. There shall be no underwater or overhead projections or obstructions which would endanger user safety or interfere with proper spa operation.
    - j. Electrical.
      - (1) Each electrical outlet in the deck, shower room, and pool water treatment equipment areas shall be equipped with a properly installed ground fault circuit interrupter (GFCI) at the outlet or at the breaker serving the outlet. Electrical outlets energized through an ORP/pH controller are not required to have a separate GFCI if the controller is equipped with a GFCI or is energized through a GFCI breaker. Ground fault circuit interrupter receptacles and breakers shall be tested at least once in each month the spa is operating. Test dates and results shall be recorded in the spa records.
        - (2) There shall be no outlets located on, or within 5 ft of, the inside wall of a spa.
        - (3) An air switch within reach of persons in the spa and its connecting tube shall be constructed of materials that do not conduct electricity.

(4) Lighting.

1. Artificial lighting shall be provided at all spas which are to be used at night or which do not have adequate natural lighting so all portions of the spa, including the bottom and main drain, may be readily seen.

2. Underwater lights and fixtures shall be designed for their intended use. When the underwater lights operate at more than 15 volts, the underwater light circuit shall be equipped with a GFCI. When underwater lights need to be repaired, the electricity shall be shut off until repairs are completed.

3. No electrical wiring shall extend over an outdoor spa.

k. Fencing.

(1) A spa shall be enclosed by a fence, wall, building, or combination thereof not less than 4 ft high. The spa enclosure shall be constructed of durable materials. A spa may be in the same room or enclosure as another spa or a swimming pool.

(2) A fence, wall, or other means of enclosure shall have no openings that would allow the passage of a 4-inch sphere, and shall not be easily climbable by toddlers. The distance between the ground and the top of the lowest horizontal support accessible from outside the facility, or between the two lowest horizontal supports accessible from outside the facility, shall be at least 45 inches. A horizontal support is considered accessible if it is on the exterior of the fence relative to the spa, or if the gap between the vertical members of the fence is greater than 1¾ inches.

(3) At least one gate or door with an opening of at least 36 inches in width shall be provided for emergency purposes. When closed, gates and doors shall comply with the requirements of (2) above. Gates and doors shall be lockable. Except where lifeguard supervision is provided whenever the spa is open, gates and doors shall be self-closing and self-latching.

(4) If there are sleeping rooms, apartments, condominiums, or permanent recreation areas which are used by children and which open directly into the spa area, the spa shall be enclosed by a barrier at least 3 ft high. No opening in the barrier shall permit the passage of a 4-inch sphere. There shall be at least one 36-inch-wide gate or door through the barrier. Gates and doors shall be lockable. Except where lifeguard supervision is provided whenever the pool is open, gates and doors provided shall be self-closing and self-latching.

l. Agitation system control. The agitation system control shall be installed out of the reach of persons in the spa. The "on" cycle for the agitation system shall be no more than ten minutes.

**15.51(5) Management, notification, and records.**

a. Certified operator required. Each facility shall employ a certified operator. One certified operator may be responsible for a maximum of three swimming pool/spa facilities.

b. Spa rules sign. A "Spa Rules" sign shall be posted near the spa. The sign shall include the following stipulations:

(1) Persons with a medical condition, including pregnancy, should not use the spa without first consulting with a physician.

- (2) Anyone having a contagious disease shall not use the spa.
- (3) Persons shall not use the spa immediately following exercise or while under the influence of alcohol, narcotics, or other drugs.
- (4) Persons shall not use the spa alone or without supervision.
- (5) Children shall be accompanied by an adult.
- (6) Persons shall not use the spa longer than ten minutes.
- (7) No one shall dive or jump into the spa.
- (8) The maximum patron load of the spa. (The maximum patron load of a spa is one individual per 2 lineal ft of inner edge of seat or bench.)
  - c. Spa depth. The maximum depth of a spa shall be posted at a conspicuous location near the spa in numerals or letters at least 3 inches high.
  - d. Glass prohibited. Glass objects other than eyeglasses, safety glass doors, and partitions shall not be permitted in a spa enclosure.
  - e. Operational records. The operator of a spa shall have the spa operational records for the previous 12 months at the facility and shall make these records available when requested by a swimming pool/spa inspector. These records shall contain a day-by-day account of spa operation, including:
    - (1) ORP and pH readings, results of pH, free chlorine or total bromine residual, cyanuric acid (if used), combined chlorine, total alkalinity, and calcium hardness tests, and any other chemical test results.
    - (2) Results of microbiological analyses.
    - (3) Water temperature measurements.
    - (4) Reports of complaints, accidents, injuries, or illnesses.
    - (5) Dates and quantities of chemical additions, including resupply of chemical feed systems.
    - (6) Dates when filters were backwashed or cleaned or a filter cartridge(s) was changed.
    - (7) Draining and cleaning of spa.
    - (8) Dates when ground fault circuit interrupter receptacles or circuit breakers were tested.
    - (9) Dates of review of material safety data sheets.
    - (10) If applicable, dates and results of tests of each SVRS installed at a facility.
  - f. Submission of records. An inspection agency may require facility management to submit copies of readings of ORP and pH, chemical test results and microbiological analyses to the inspection agency on a monthly basis. The inspection agency shall notify the facility management of this requirement in writing at least 15 days before the reports are to be submitted for the first time. The facility management shall submit the required reports to the inspection agency within 10 days after the end of each month of operation.

g. Operations manual. A permanent manual for operation of a spa shall be at the facility. The manual shall include instructions for routine operations at the spa including, but not necessarily limited to:

- (1) Maintaining the chemical supply for the chemical feed systems.
- (2) Filter backwash or cleaning.
- (3) Water testing procedures, including the required frequency of testing.
- (4) Procedures for draining, cleaning and refilling the spa, including chemical adjustments and controller adjustments.
- (5) Controller sensor maintenance, where applicable.
- (6) Superchlorination.

h. Schematic drawing. A schematic drawing of the spa recirculation system shall be posted in the swimming pool filter room or shall be in the operations manual. Clear labeling of the spa piping with flow direction and water status (unfiltered, treated, backwash) may be substituted for the schematic drawing.

i. Material safety data sheets. Copies of material safety data sheets (MSDS) for the chemicals used at the spa shall be kept at the facility in a location known and readily accessible to facility staff with chemical-handling responsibilities. Each member of the facility staff with chemical-handling responsibilities shall review the MSDS at least annually. The facility management shall retain records of the MSDS reviews at the facility and shall make the records available upon request by a swimming pool inspector.

j. Emergency plans. A written emergency plan shall be provided. The plan shall include, but may not be limited to, actions to be taken in cases of drowning, hyperthermia, serious illness or injury, chemical-handling accidents, weather emergencies, and other serious incidents. The emergency plan shall be reviewed with the facility staff at least once a year, and the dates of review or training shall be recorded. The written emergency plan shall be kept at the facility and shall be available to a swimming pool inspector upon request.

k. Temporary spas.

- (1) A person offering temporary spas for rent shall be a certified operator.
- (2) Records of temporary spas shall be maintained for one year which identify the location of all installations.
- (3) Written operational instructions shall be provided to individuals operating or leasing a spa. The instructions shall be consistent with this chapter and provide guidance in the following areas:
  1. Acceptable sources of water supply and procedure for cross-connection control—15.51(1)“g.”
  2. Methods for routine cleaning and superchlorination—15.51(3)“b.”
  3. Procedures for maintaining prescribed levels of disinfectant residual, pH, total alkalinity, clarity, and microbiological quality, and using the test kit—15.51(2)“a” to 15.51(2)“f.”

4. Procedures for maintaining temperature and operation of temperature controls—15.51(4)“c.”

5. Warning to prevent electrical hazards—15.51(4)“j.”

6. Procedures for operation of filters, including backwashing—15.51(1)“a.”

7. A warning to the renter that the renter should prevent unauthorized or accidental access to a spa when it contains water.

**15.51(6) Reports.** Spa operators shall report to the local inspection agency, within one working day of occurrence, all deaths; near drowning incidents; head, neck, and spinal cord injuries; and any injury which renders a person unconscious or requires immediate medical attention.

**641--15.52(135I) Construction and reconstruction.** A spa constructed or reconstructed after May 4, 2005, shall comply with the following standards. Nothing in these rules is intended to exempt spas and associated structures from any applicable federal, state or local laws, rules or ordinances. Applicable requirements include, but are not limited to, the handicapped access and energy requirements of the state building code, the fire and life safety requirements of the state fire marshal, the rules of the department of workforce development, and the rules of the department of natural resources.

**15.52(1) Construction permits.**

a. Permit required. No spa shall be constructed or reconstructed without the owner or a designated representative of the owner first receiving a permit from the department. Construction shall be completed within 24 months from the date the construction permit is issued unless a written extension is granted by the department.

b. Permit application. The owner of a proposed or existing spa or a designated representative of the owner shall apply for a construction permit on forms provided by the department. The application shall be submitted to the department at least 15 days prior to construction of a new spa or the reconstruction of a spa.

c. Plan submission. Three sets of plans and specifications shall be submitted with the application. A nonrefundable plan review fee shall be remitted with the application for each spa as required in 15.12(4).

d. Notification of completion. The owner of a newly constructed or reconstructed facility or the owner's designated representative shall notify the department in writing at least 15 business days prior to opening the spa.

**15.52(2) Plans and specifications.**

a. Plan certification. Plans and specifications shall be sealed and certified in accordance with the rules of the engineering and land surveying examining board or the architectural examining board by an engineer or architect licensed to practice in Iowa.

(1) This requirement may be waived by the department if the project is the addition or replacement of a chemical feed system, including a disinfection system, or a simple replacement of a filter or pump or both.

(2) If the requirement for engineering plans is waived, the owner of the spa assumes full responsibility for ensuring that the construction or reconstruction complies with these rules and with any other applicable federal, state and local laws, rules, and ordinances.

b. Content of plans. Plans and specifications shall contain sufficient information to demonstrate to the department that the proposed spa will meet the requirements of this chapter. The information shall include, but may not be limited to:

(1) The name and address of the owner and the name, address, and telephone number of the architect or engineer responsible for the plans and specifications. If a contractor applies for a construction permit, the name, address and telephone number of the contractor shall be included.

(2) The location of the project by street address or other legal description.

(3) A site plan showing the spa in relation to buildings, streets, any swimming pool within the same general area, water and sewer service, gas service, and electrical service.

(4) Detailed scale drawings of the spa and its appurtenances, including a plan view and cross sections at a scale of ¼ inch per foot or larger. The location of inlets, overflow system components, main drains, deck and deck drainage, the location and size of spa piping, and the spa steps and handrails shall be shown.

(5) A drawing(s) showing the location, plan, and elevation of filters, pumps, chemical feeders, ventilation devices, and heaters, and additional drawings or schematics showing operating levels, backflow preventers, valves, piping, flow meters, pressure gauges, thermometers, the make-up water connection, and the drainage system for the disposal of filter backwash water.

(6) Plan and elevation drawings of bathhouse facilities including dressing rooms; lockers; showers, toilets and other plumbing fixtures; water supply and drain and vent systems; gas service; water heating equipment; electrical fixtures; and ventilation systems, if provided.

(7) Complete technical specifications for the construction of the spa, for the spa equipment and for the spa appurtenances.

c. Deviation from plans. No deviation from the plans and specifications or conditions of approval shall be made without prior approval of the department.

### **15.52(3) General design.**

a. Materials. A spa shall be constructed of materials which are inert, stable, nontoxic, watertight, and durable.

b. Water depth. The maximum water depth for a general use spa shall not exceed 4 ft measured from the overflow level of the spa. The maximum depth of any seat or sitting bench shall not exceed 2 ft measured from the overflow level. A special-use spa may be deeper than 4 ft with written approval from the department.

c. Structural loading. A spa shall be designed and constructed to withstand anticipated structural loading for both full and empty conditions.

d. Distance from a swimming pool. A spa may be immediately adjacent to a swimming pool, or a minimum of 4 ft from a Class B swimming pool or 6 ft from a Class A swimming

pool. The distance shall be measured from the outside edge of a ladder support or handrail on the deck, a lifeguard stand, a swimming pool slide, or a similar obstruction.

e. Water supply. The water supplied to a spa shall be from a source meeting the requirements of the department of natural resources for potable water.

(1) Water supplied to a spa shall be discharged to the spa system through an air gap or a reduced-pressure principle backflow device complying with the requirements of AWWA C-511-97, "Reduced-Pressure Principle Backflow-Prevention Assembly."

(2) Each hose bib at a facility shall be equipped with an atmospheric vacuum breaker or a hose connection backflow preventer.

f. Sewer separation required. No part of a spa recirculation system may be directly connected to a sanitary sewer. An air break or an air gap shall be provided.

g. Operations manual. The owner shall require that a permanent manual for operation of a spa be provided. The manual shall include, but may not be limited to:

(1) Instructions for routine operations at the spa, including, but not necessarily limited to:

1. Filter backwash or cleaning.

2. Maintaining the chemical supply for the chemical feed systems.

3. Vacuuming and cleaning the spa.

4. Spa water testing procedures, including the frequency of testing.

5. Superchlorination.

6. Controller sensor maintenance and calibration, including the recommended frequency of maintenance.

(2) For each centrifugal pump, a pump performance curve plotted on an 8½" x 11" or larger sheet.

(3) For each chemical feeder, the maximum rated output listed in weight per time or volume per time units.

(4) Basic operating and maintenance instructions for spa equipment that requires cleaning, adjustment, lubrication, or parts replacement, with recommended maintenance frequencies or the parameters that would indicate a need for maintenance.

h. A schematic drawing of the spa recirculation system shall be posted in the spa filter room or shall be included in the operations manual. Clear labeling of the spa piping with flow direction and water status (unfiltered, treated, backwash) may be substituted for the schematic drawing.

i. A permanent file containing the operations and maintenance manuals for the equipment installed at the spa shall be established. The file shall include a source for parts or maintenance for the equipment at the spa. The file may be located in a location other than the facility, but the file shall be readily available to the facility management and maintenance staff.

**15.52(4) Decks.** A spa shall have a deck around at least 50 percent of the spa perimeter. The deck shall be at least 4 ft wide.

- a. Deck materials. The deck shall be constructed of stable, nontoxic, and durable materials.
- b. Deck drainage. The deck shall drain away from the spa at a slope of at least 1/8 inch/ft, but no more than 1/2 inch/ft to deck drains or to the surrounding ground surface. The deck shall be constructed to eliminate standing water.
- c. Deck surface. The deck shall be provided with a slip-resistant, durable, and cleanable surface.
- d. Deck covering. A deck covering may be used provided that:
  - (1) The covering allows drainage so that the covering and the deck do not remain wet or retain moisture.
  - (2) The covering is inert and will not support bacterial growth.
  - (3) The covering provides a slip-resistant surface.
  - (4) The covering is durable and cleanable.
- e. Steps or ramp required. When the top rim of a spa is more than 24 inches above the surrounding floor area, stairs or a ramp shall be provided to the top of the spa. Stairs or a ramp shall be designed in accordance with the state building code or the building code adopted by the jurisdiction in which the spa is located.

**15.52(5) Recirculation.**

- a. Separate recirculation required. A spa shall have a recirculation system separate from another spa or any swimming pool.
- b. Recirculation flow rate. The recirculation system shall be capable of processing one spa volume of water within 30 minutes. For spas with skimmers, the recirculation flow rate shall be at least 3.8 gpm per lineal inch of skimmer weir or the flow rate required above, whichever is greater.
- c. Recirculation pump. The recirculation pump(s) shall be listed by NSF or by another listing agency approved by the department as complying with the requirements of Standard 50 and shall comply with the following requirements:
  - (1) The pump(s) shall supply the recirculation flow rate required by 15.52(5)“b” at a TDH of at least that given in “1,” “2” or “3” below, unless a lower TDH is shown by the designer to be hydraulically appropriate. A valve for regulating the rate of flow shall be provided in the recirculation pump discharge piping.
    - 1. 40 feet for vacuum filters; or
    - 2. 60 feet for pressure sand filters; or
    - 3. 70 feet for pressure diatomaceous earth filters or cartridge filters.
  - (2) A separate pump or pumps shall be provided for the spa agitation system.
  - (3) For sand filter systems, the pump and filter system shall be designed so that each filter can be backwashed at a rate of at least 15 gpm/ft<sup>2</sup> of filter area.

(4) If a pump is located at an elevation higher than the spa water surface, it shall be self-priming or the piping shall be arranged to prevent the loss of pump prime when the pump is stopped.

(5) Where a vacuum filter is used, a vacuum limit control shall be provided on the pump suction line. The vacuum limit switch shall be set for a maximum vacuum of 18 in Hg.

(6) A compound vacuum-pressure gauge shall be installed on the pump suction line as close to the pump as practical. A vacuum gauge may be used for pumps with suction lift. A pressure gauge shall be installed on the pump discharge line as close to the pump as practical. Gauges shall be of such a size and located so that they may be easily read by the operator.

(7) On pressure filter systems, a hair and lint strainer shall be installed on the suction side of the recirculation pump. The hair and lint strainer basket shall be readily accessible for cleaning, changing, or inspection. A spare strainer basket shall be provided. This requirement may be waived for systems using vertical turbine pumps or pumps designed for solids handling.

d. Spa water heater.

(1) A heating coil, pipe or steam hose shall not be installed in a spa.

(2) Gas-fired spa water heaters shall comply with the requirements of ANSI/AGA Z21.56-2001, ANSI/AGA Z21.56a-2004, and ANSI/AGA Z21.26b-2004. The data plate of the heater shall bear the AGA mark.

(3) Electric spa water heaters shall comply with the requirements of UL 1261 and shall bear the UL mark.

(4) A spa water heater with an input of greater than 400,000 BTU/hour (117 kilowatts) shall have a water heating vessel constructed in accordance with ASME Boiler Code, Section 8. The data plate of the heater shall bear the ASME mark.

(5) A thermometer shall be installed in the piping to measure the temperature of the water returning to the spa. The thermometer shall be located so that it may be read easily by an operator.

(6) Combustion air shall be provided for fuel-burning water heaters as required by the state plumbing code, 641--Chapter 25, Iowa Administrative Code, or as required by local ordinance.

(7) Fuel-burning water heaters shall be vented as required by the state plumbing code, 641--Chapter 25, Iowa Administrative Code, or as required by local ordinance.

(8) Fuel-burning water heaters shall be equipped with a pressure relief valve sized for the energy capacity of the heater.

e. Flow meters.

(1) Each spa recirculation system shall be provided with a permanently installed flow meter to measure the recirculation flow rate.

(2) A flow meter shall be accurate within 5 percent of the actual flow rate between  $\pm 20$  percent of the recirculation flow rate specified in 15.52(5)“b” or the nominal recirculation flow rate specified by the designer.

(3) A flow meter shall be installed on a straight length of pipe with sufficient clearance from valves, elbows or other sources of turbulence to attain the accuracy required by 15.52(5)“e”(2). The flow meter shall be installed so that it may be easily read by the facility staff, or a remote readout of the flow rate shall be installed where it may be easily read by the operator. The designer may be required to provide documentation that the installation meets the requirements of subparagraph (2).

**15.52(6) Filtration.** A filter shall be listed by NSF or by another listing agency approved by the department as complying with the requirements of Standard 50 and shall comply with the following requirements:

a. Pressure gauges. Each pressure filter shall have a pressure gauge on the inlet side. Gauges shall be of such a size and located so that they may be read easily by the operator. A differential pressure gauge which gives the difference in pressure between the inlet and outlet of the filter may be used in place of a pressure gauge.

b. Air relief valves. An air relief valve shall be provided for each pressure filter.

c. Backwash water visible. Backwash water from a pressure filter shall discharge through an observable free fall, or a sight glass shall be installed in the backwash discharge line.

d. Backwash water discharge. Backwash water shall be discharged indirectly to a sanitary sewer or another point of discharge approved by the department of natural resources.

e. Rapid sand filter.

(1) The filtration rate shall not exceed 3 gpm/ft<sup>2</sup> of filter area.

(2) The backwash rate shall be at least 15 gpm/ft<sup>2</sup> of filter area.

f. High-rate sand filter.

(1) The filtration rate shall not exceed 15 gpm/ft<sup>2</sup> of filter area.

(2) The backwash rate shall be at least 15 gpm/ft<sup>2</sup> of filter area.

(3) If more than one filter tank is served by a pump, the designer shall demonstrate that backwash flow rate to each filter tank meets the requirements of subparagraph (2), or an isolation valve shall be installed at each filter tank to permit each filter to be backwashed individually.

g. Vacuum sand filter.

(1) The filtration rate shall not exceed 15 gpm/ft<sup>2</sup> of filter area.

(2) The backwash rate shall be at least 15 gpm/ft<sup>2</sup> of filter area.

(3) An equalization screen shall be provided to evenly distribute the filter influent over the surface of the filter sand.

(4) Each filter system shall have an automatic air-purging cycle.

h. Sand filter media shall comply with the filter manufacturer's specifications.

i. Diatomaceous earth filters.

(1) The filtration rate shall not be greater than 1.5 gpm/ft<sup>2</sup> of effective filter area except that a maximum filtration rate of 2.0 gpm/ft<sup>2</sup> may be allowed where continuous body feed is provided.

(2) Diatomaceous earth filter systems shall have piping to allow recycling of the filter effluent during precoat.

(3) Waste diatomaceous earth shall be discharged to a sanitary sewer or other point of discharge approved by the department of natural resources. The discharge may be subject to the requirements of the local waste water utility.

j. Cartridge filters.

(1) The filtration rate shall not exceed 0.38 gpm/ft<sup>2</sup>.

(2) A duplicate set of cartridges shall be provided.

k. Other filter systems may be used if approved by the department.

**15.52(7) Piping.**

a. Piping standards. Spa piping shall conform to applicable nationally recognized standards and shall be specified for use within the limitations of the manufacturer's specifications. Spa piping shall comply with the applicable requirements of NSF/ANSI Standard 61, "Drinking Water System Components—Health Effects." Plastic pipe shall comply with the requirements of NSF/ANSI Standard 14, "Plastic Piping Components and Related Materials," for potable water pipe.

b. Pipe sizing. Spa recirculation piping shall be sized so that water velocities do not exceed 6 ft/sec for suction flow and 10 ft/sec for pressure flow.

c. Skimmer pipe capacity. The piping for the skimmer system shall be designed to convey 100 percent of the recirculation flow rate.

d. Main drain pipe capacity. The main drain piping shall be designed to convey 100 percent of the recirculation flow rate. If the spa agitation system uses the same suction piping as the recirculation system, the piping shall be designed for the combined flow within the requirements of paragraph "b" above.

e. Separate piping required. The piping from the spa agitation system pump to the spa shall be separate from the recirculation system piping.

**15.52(8) Inlets.**

a. Wall inlets shall be provided for a spa.

b. The inlets shall be adequate in design, number, location, and spacing to ensure effective distribution of treated water and the maintenance of a uniform disinfectant residual throughout the spa. At least two recirculation inlets shall be provided.

(1) Inlets shall be located at least 6 inches below the design water surface.

(2) Inlets shall be directional flow-type inlets. Each inlet shall have a fitting with an opening of 1 inch diameter or less.

c. Each agitation system opening shall have a fitting with an opening of 1 inch diameter or less.

**15.52(9) Skimmers.** A recessed automatic surface skimmer shall be listed by NSF or by another listing agency approved by the department as complying with the requirements of Standard 50, except that an equalizer is not required for a skimmer installed in a spa equipped with an automatic water level maintenance device.

a. Skimmers required. A spa shall have at least one skimmer for each 100 ft<sup>2</sup> of surface area or fraction thereof.

b. Flow-through skimmers. Each skimmer shall be designed for a flow-through rate of at least 3.8 gpm per lineal inch of weir. The combined capacity of all skimmers in a spa shall not be less than the total recirculation rate.

c. Skimmer weirs. Skimmers shall have weirs that adjust automatically to variations in water level of at least 4 inches.

d. Flow control. Skimmers shall be equipped with a device to control flow through the skimmer.

e. Equalizers. If a spa is not equipped with an automatic water level maintenance device, each skimmer shall have an operational equalizer. The equalizer opening in the spa shall be covered with a fitting listed by a listing agency approved by the department as meeting the requirements of the ASME standard.

f. The skimmer(s) shall not be connected to the agitation system.

**15.52(10) Main drain system.** Each spa shall have a convenient means of draining the water from the spa for service. Spa main drains may be on the sidewall of a spa near the spa bottom.

a. Suction outlets. If a spa pump is directly connected to a main drain or another fully submerged outlet, the pump shall be connected to two or more fully submerged outlets or to a single fully submerged outlet that is unblockable. The recirculation system and the agitation system may use the same fully submerged outlet(s).

(1) Two fully submerged outlets that are directly connected to one or more pumps in the same outlet system shall be at least 3 ft apart on center or on different spa surfaces. If three or more fully submerged outlets that are all directly connected to one or more pumps in the same outlet system are installed, the distance between the outlets farthest apart shall be at least 3 ft on center or the outlets shall be installed on different spa surfaces.

(2) If there is only one fully submerged outlet in an outlet system, the flow rating of the outlet cover/grate, sump and the associated piping shall be at least 100 percent of the maximum system flow rate. If two or more fully submerged outlets are installed in an outlet system, the combined flow rating of the cover/grates, the sumps and the associated piping shall be at least 200 percent of the maximum system flow rate. Multiple outlets in an outlet system shall be plumbed in parallel.

The maximum system flow rate for the recirculation system is the flow rate specified in 15.52(5)“b” or the design flow rate, whichever is greater. The maximum system flow rate for the agitation system is the specified design flow rate. If a flow rate is not specified, the

maximum system flow rate shall be the flow capacity of the pump(s) at 50 feet TDH, based on the manufacturer's published pump curves.

b. Control valve. If a main drain is connected to the recirculation system, there shall be a control valve to adjust the flow between the main drain and the overflow system.

c. Main drain covers. Each main drain or other fully submerged outlet shall be covered with a cover/grate that is listed as complying with the requirements of the ASME standard by a listing agency approved by the department. A listed cover/grate shall be used in accordance with its listing.

(1) The flow rating for the cover/grate(s) shall comply with 15.52(10)“a”(2).

(2) The mark of a listing agency acceptable to the department shall be permanently marked on the top surface of each manufactured cover/grate.

(3) Field fabricated cover/grates shall be certified for compliance to the ASME standard by a professional engineer licensed in Iowa. A certificate of compliance shall be provided to the spa owner and to the department.

(4) The fully submerged outlet cover/grate shall be designed to be securely fastened to the spa so that the cover/grate is not removable without tools.

d. For outlet systems with manufactured sumps, the sumps shall be listed by a listing agency acceptable to the department for compliance with the ASME standard. Field fabricated sumps shall be designed in accordance with the ASME standard and shall be certified by an engineer licensed in Iowa.

#### **15.52(11) Disinfection and pH control.**

a. Controller required. A spa recirculation system shall be equipped with an automatic controller for maintenance of the disinfectant level and pH in the spa water. The control output of the controller to the chemical feed systems shall be based on the continuous measurement of the ORP and the pH of the water in the spa recirculation system.

b. No disinfection system designed to use di-chlor or tri-chlor shall be installed for an indoor spa after May 4, 2005.

c. Disinfection system. A continuous feed disinfectant system shall be provided. The disinfectant feed system shall have the capacity to supply at least 10 mg/L chlorine or bromine based on the recirculation flow rate required in 15.52(5)“b.”

d. Disinfection feeder listing. A disinfectant feeder shall be listed by NSF or by another listing agency approved by the department as complying with the requirements of Standard 50.

e. Gas chlorine shall not be used as a disinfectant for a spa.

f. Solution feed. Where a metering pump is used to feed a solution of disinfectant, the disinfectant solution container shall have a capacity of at least one day's supply at the rate specified in 15.52(11)“c.”

g. Erosion chlorine feeders. The storage capacity of an erosion feeder shall be at least one day's supply of disinfectant at the rate specified in 15.52(11)“c.”

h. pH chemical system. Each spa shall have a metering pump for the addition of a pH control chemical to the spa recirculation system, or a carbon dioxide (CO<sub>2</sub>) gas feed system. A metering pump shall be listed by NSF or another listing agency approved by the department as complying with the requirements of Standard 50.

i. Chemical feed stop. The chemical feed systems shall be designed so that chemical feed is automatically and positively stopped when the recirculation flow is interrupted.

j. Test equipment. Test equipment complying with the following requirements shall be provided.

(1) The test equipment shall provide for the direct measurement of free chlorine and combined chlorine from 0 to 10 ppm in increments of 0.2 ppm or less over the full range, or total bromine from 0 to 20 ppm in increments of 0.5 ppm over the full range.

(2) The test equipment shall provide for the measurement of spa water pH from 7.0 to 8.0 with at least five increments in that range.

(3) The test equipment shall provide for the measurement of total alkalinity and calcium hardness with increments of 10 ppm or less.

(4) The test equipment shall provide for the measurement of cyanuric acid from 30 to 100 ppm. This requirement may be waived for a facility that does not use cyanuric acid or a stabilized chlorine disinfectant.

#### **15.52(12) Safety.**

a. Spa entry. A spa shall have at least one stairway, ramp, ladder, or set of recessed steps designating a point of entry and exit for every 50 ft of perimeter or fraction thereof.

(1) Stair steps leading into a spa shall be at least 12 inches wide, the tread depth shall be no less than 10 inches, and the riser height shall be no more than 12 inches. If a bench or seat is used as a part of the stair, the first riser height from the bottom of the spa to the seat or bench shall be no more than 14 inches. Except for the first riser, the riser height shall be uniform.

1. Stair steps shall be provided with a slip-resistant surface.

2. The stair steps shall be provided with two handrails or grab rails, one on each side of the steps.

(2) Ladders.

1. Ladders shall be provided with a handrail which extends from below the water surface to the top surface of the deck on each side of the ladder.

2. Ladders shall be of a color contrasting with the spa walls.

(3) Recessed steps.

1. Recessed steps shall have a tread depth of at least 5 inches, a tread width of at least 12 inches, and a uniform rise of no more than 12 inches.

2. Recessed steps shall be provided with a handrail or with deck-level grab rails on each side of the recessed steps.

3. Recessed steps shall drain to the spa.

(4) Handrails and grab rails.

1. Ladders, handrails, and grab rails shall be designed to be securely anchored and so that tools are required for their removal.

2. Ladders, handrails, and grab rails shall be of corrosion-resistant materials, or provided with corrosion-resistant coatings. They shall have no exposed sharp edges.

b. Agitation system control. The agitation system start control shall be installed out of the reach of persons in the spa. The “on” cycle for the agitation system shall be no more than ten minutes.

c. Electrical. New construction or reconstruction shall comply with the requirements of the National Electrical Code, 70-2005, as published by the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

d. Lighting. Artificial lighting shall be provided at indoor spas and at outdoor spas which are to be used after sunset, in accordance with the following:

(1) Underwater lighting of at least 60 lamp lumens/ft<sup>2</sup> or 0.5 watts/ft<sup>2</sup> of water surface area and area lighting of at least 10 lumens/ft<sup>2</sup> or 0.6 watts/ft<sup>2</sup> of deck area.

(2) If underwater lights are not provided, overhead lighting of at least 30 lumens/ft<sup>2</sup> or 2.0 watts/ft<sup>2</sup> of spa water surface area shall be provided.

e. Spa enclosure.

(1) A spa shall be enclosed by a fence, wall, building, or combination thereof not less than 4 ft high. The spa enclosure shall be constructed of durable materials. A spa may be in the same room or enclosure as another spa or a swimming pool.

(2) A fence, wall, or other means of enclosure shall have no openings that would allow the passage of a 4-inch sphere, and shall not be easily climbable by toddlers. The distance between the ground and the top of the lowest horizontal support accessible from the outside of the facility, or between the two lowest horizontal supports accessible from outside the facility, shall be at least 45 inches. A horizontal support is considered accessible if it is on the exterior of the fence relative to the spa, or if the gap between the vertical members of the fence is greater than 1¾ inches.

(3) At least one gate or door with an opening of at least 36 inches in width shall be provided for emergency purposes. When closed, gates and doors shall comply with the requirements of (2) above. Gates and doors shall be lockable. Except where lifeguard or structured program supervision is provided whenever the spa is open, gates and doors shall be self-closing and self-latching.

(4) For indoor spas, if there are sleeping rooms, apartments, condominiums, or permanent recreation areas used by children which open directly into the spa area, the spa shall be enclosed by a barrier at least 3 ft high. No opening in the barrier shall permit the passage of a 4-inch sphere. There shall be at least one 36-inch-wide gate or door through the barrier. Gates and doors shall be lockable. Except where lifeguard supervision is provided whenever the spa is open, gates or doors shall be self-closing and self-latching.

## ADMINISTRATION

### **641--15.6(135I) Enforcement.**

**15.6(1)** The department may inspect swimming pools and spas regulated by these rules and enforce these rules. A city, county or district board of health may inspect swimming pools and spas regulated by these rules and enforce these rules in accordance with agreements executed with the department pursuant to the authority of Iowa Code chapters 28E and 135I.

**15.6(2)** The inspection agency shall take the following steps when enforcement of these rules is necessary.

a. Owner notification. As soon as possible after the violations are noted, the inspection agency shall provide written notification to the owner of the facility that:

- (1) Cites each section of the Iowa Code or Iowa Administrative Code violated.
- (2) Specifies the manner in which the owner or operator failed to comply.
- (3) Specifies the steps required for correcting the violation.
- (4) Requests a corrective action plan, including a time schedule for completion of the plan.
- (5) Sets a reasonable time limit, not to exceed 30 days from the receipt of the notice, within which the owner of the facility must respond.

b. Corrective action plan review. The inspection agency shall review the corrective action plan and approve it or require that it be modified.

c. Failure to comply. When the owner of a swimming pool or spa fails to comply with conditions of the written notice, the inspection agency may take enforcement action in accordance with Iowa Code chapters 137 and 135I, or in accordance with local ordinances.

d. Adverse actions and the appeal process. If the department determines that the provisions of Iowa Code chapter 135I and these rules have been or are being violated, the department may withhold or revoke the registration of a swimming pool or spa, or the department or local board of health may order that a swimming pool or spa be closed until corrective action has been taken. If the swimming pool or spa is operated without being registered, or in violation of the order of the department, the department or local inspection agency may request that the county attorney or the attorney general make an application in the name of the state to the district court of the county in which the violations have occurred for an order to enjoin the violations. This remedy is in addition to any other legal remedy available to the department.

(1) A local inspection agency may request that the department withhold or revoke the registration of a swimming pool or spa, or issue an order to close a swimming pool or spa. The request shall be in writing and shall list the violations of Iowa Code chapter 135I and these rules that have occurred or are occurring when the request is made. The local inspection agency shall provide a full accounting of the actions taken by the local inspection agency to enforce Iowa Code chapter 135I and these rules.

(2) Notice of the decision to withhold or revoke the registration for a swimming pool or spa, or an order to close a swimming pool or spa shall be delivered by restricted certified mail, return

receipt requested, or by personal service. The notice shall inform the owner of the right to appeal the decision and the appeal procedures. The local inspection agency and the county attorney in the county where the swimming pool or spa is located shall be notified in writing of the order.

(3) An appeal of a decision to withhold or revoke a registration or of an order to close shall be submitted by certified mail, return receipt requested, within 30 days of receipt of the department's notice. The appeal shall be sent to the Iowa Department of Public Health, Division Environmental Health, Lucas State Office Building, 321 East 12th Street, Des Moines, Iowa 50319-0075. If such a request is made within the 30-day time period, the decision or order shall be deemed to be suspended. Prior to or at the hearing, the department may rescind the decision or order upon satisfaction that the reason for the order has been or will be removed. After the hearing, or upon default of the applicant or alleged violator, the administrative law judge shall affirm, modify or set aside the order. If no appeal is submitted within 30 days, the decision or order shall become the department's final agency action.

(4) Upon receipt of an appeal that meets contested case status, the appeal shall be transmitted to the department of inspections and appeals within 5 working days of receipt pursuant to the rules adopted by that department regarding the transmission of contested cases. The information upon which the revocation or withholding is based shall be provided to the department of inspections and appeals.

(5) The hearing shall be conducted in accordance with 481--Chapter 10.

(6) When the administrative law judge makes a proposed decision and order, it shall be served by restricted certified mail, return receipt requested, or delivered by personal service. The proposed decision and order then becomes the department's final agency action without further proceedings 10 days after it is received by the aggrieved party unless an appeal to the director is taken as provided in subparagraph 15.6(2)“d”(7).

(7) Any appeal to the director of the department for review of the proposed decision and order of the administrative law judge shall be filed in writing and mailed to the director by certified mail, return receipt requested, or delivered by personal service within 10 days after the receipt of the administrative law judge's proposed decision and order by the aggrieved party. A copy of the appeal shall also be mailed to the administrative law judge. Any request for appeal shall state the reason for appeal.

(8) Upon receipt of an appeal request, the administrative law judge shall prepare the record of the hearing for submission to the director. The record shall include the following:

1. All pleadings, motions and rules.
2. All evidence received or considered and all other submissions by recording or transcript.
3. A statement of all matters officially noticed.
4. All questions and offers of proof, objections, and rulings thereon.
5. All proposed findings and exceptions.
6. The proposed findings and order of the administrative law judge.

(9) The decision and order of the director becomes the department's final agency action upon receipt by the aggrieved party and shall be delivered by restricted certified mail, return receipt requested.

(10) It is not necessary for the owner to file an application for a rehearing to exhaust administrative remedies when appealing to the director or the district court as provided in Iowa Code section 17A.19. The aggrieved party to the final agency action of the department that has exhausted all administrative remedies may petition for judicial review of that action pursuant to Iowa Code chapter 17A.

(11) Any petition for judicial review of a decision and order shall be filed in the district court within 30 days after the decision and order becomes final. A copy of the notice of appeal shall be sent by certified mail, return receipt requested, or by personal service to the Iowa Department of Public Health, Division of Environmental Health, 321 East 12th Street, Des Moines, Iowa 50319-0075.

(12) The party who appeals a final agency action to the district court shall pay the cost of the preparation of a transcript of the contested case hearing for the district court.

**641--15.7(135I) Variances.** A variance to these rules may be granted only by the department. A variance can be granted only if sufficient information is provided to substantiate the need for and propriety of the action.

**15.7(1)** Requests for variances shall be in writing and shall be sent to the local inspection agency for comment. The local inspection agency shall send the request for variance to the department within 15 business days of its receipt.

**15.7(2)** The granting or denial of a variance will take into consideration, but not be limited to, the following criteria:

a. Substantially equal protection of health and safety shall be provided by a means other than that prescribed in the particular rule, or

b. The degree of violation of the rule is sufficiently small so as not to pose a significant risk of injury to any individual, and the remedies necessary to alleviate this minor violation would incur substantial and unreasonable expense on the part of the person seeking a variance.

**15.7(3)** Decisions shall be issued in writing by the department and shall include the reasons for denial or granting of the variance. Copies of decisions shall be kept at the department, and a copy shall be sent to the local inspection agency.

**15.7(4)** The applicant for a variance that is denied may request a review of the denial by the director of the department. The request shall be submitted in writing within 30 days of the applicant's receipt of the department's denial of a variance request. The request for a review shall be addressed to the Iowa Department of Public Health, Office of the Director, Lucas State Office Building, 321 East 12<sup>th</sup> Street, Des Moines, Iowa 50319-0075. The decision of the director shall be considered the department's final agency action.

**15.7(5)** The applicant may petition for judicial review of the final agency action pursuant to Iowa Code chapter 17A.

**641--15.8(135I) Penalties.** A person violating a provision of this chapter shall be guilty of a simple misdemeanor pursuant to the authority of Iowa Code section 135I.5. Each day upon which a violation occurs constitutes a separate violation.

**641--15.9(135I) Registration.**

15.9(1) Swimming pool and spa registration. No swimming pool or spa shall be operated in the state without being registered with the department. The owner of a swimming pool or spa or the owner's designated representative shall register the swimming pool or spa before the swimming pool or spa is first used and shall renew the registration annually on or before April 30. The initial registration and registration renewal shall be submitted on forms supplied by the department. The registration for a swimming pool or spa is valid from May 1 through the following April 30.

**15.9(2) Change in ownership.** Within 30 days of the change in ownership of a swimming pool or spa, the new owner shall furnish the department with the following information:

- a. Name and registration number of the swimming pool or spa.
- b. Name, address, and telephone number of new owner.
- c. Date the change in ownership took place.
- d. A nonrefundable fee of \$20 per swimming pool or spa.

**15.9(3) Withholding registration.** The department may withhold or revoke the registration of a swimming pool or spa pursuant to 15.6(2)"d" if an owner or the owner's designated representative has violated a provision of Iowa Code chapter 135I or a rule in this chapter.

**641--15.10(135I) Training courses.**

**15.10(1)** A training course designed to fulfill the requirements of 15.11(135I) shall be reviewed by the department.

**15.10(2)** At least 15 days prior to the course date, the course director shall submit at a minimum the following to the department:

- a. A course outline with a list of instructors and guest speakers and their qualifications.
- b. Date or dates the course is to be held.
- c. Place the course is to be held.
- d. Number of hours of instruction.
- e. Course agenda.

**15.10(3)** The department shall approve or disapprove the course of instruction in writing within 10 business days of receipt of the information required in 15.10(2).

**15.10(4)** Within 30 business days after the conclusion of the course of instruction, the course director shall furnish the department with the name and address of each person who successfully completed the course.

### **641--15.11(135I) Swimming pool/spa operator qualifications.**

**15.11(1)** A person designated as a certified operator of a facility for compliance with 15.4(6)“a” and 15.51(5)“a” shall have successfully completed a CPO<sup>®</sup> certification course, an AFO certification course, a PPSO certification course, an LAFT certification course, or another course of instruction approved by the department. A copy of a current, valid CPO<sup>®</sup>, AFO, PPSO, or LAFT certificate for the certified operator shall be maintained in the pool or spa records.

**15.11(2)** A certified operator with a CPO<sup>®</sup> certificate, a PPSO certificate, or an LAFT certificate shall attend at least ten hours of continuing education between the original certification date and the first renewal of the certificate, and shall attend at least ten additional hours of continuing education before each subsequent renewal of the certificate. A certified operator with an AFO certificate shall attend at least six hours of continuing education between the original certification date and the first renewal of the certificate, and shall attend at least six additional hours of continuing education before each subsequent renewal of the certificate. The department shall determine the continuing education requirements for a certified operator training course that is approved after May 4, 2005. Proof of continuing education shall be kept with certification records at the facility.

### **641--15.12(135I) Fees.**

**15.12(1) Registration fees.** For each swimming pool or spa, the registration fee is \$35. Registration fees are delinquent if not received by the department by April 30 or the first business day thereafter. The owner shall pay a \$25 penalty for each month or fraction thereof that the fee is late for each swimming pool or spa that is required to be registered.

**15.12(2) Registration change fees.** For each swimming pool or spa, the fee for a change of ownership, change of facility name, or other change in registration is \$20.

**15.12(3) Inspection fees.** The inspection agency shall bill the owner of a facility upon completion of an inspection. Inspection fees are due upon receipt of a notice of payment due.

When the swimming pool is located within the jurisdiction of a local inspection agency local inspection agency may establish fees needed to defray the costs of inspection and enforcement under this chapter. Inspection fees billed by a local inspection agency shall be paid to the local inspection agency or its designee.

a. Inspection fee schedule.

Table 7  
Swimming Pools and Spas

| Pool Type  | Inspection Fee |
|--|----------------|
| Swimming pool or leisure river, surface area less than 1500 ft <sup>2</sup>  | \$170          |
| Swimming pool or leisure river, surface area 1500 ft <sup>2</sup> or greater | \$270          |
| Wave pool  | \$270          |
| Water slide and plunge pool  | \$270          |
| Spa  | \$170          |
| Wading pool less than or equal to 500 ft <sup>2</sup>                        | \$50           |
| Wading pool greater than 500 ft <sup>2</sup>                                 | \$90           |
| Residential swimming pool used for commercial purposes                       | \$50           |

Table 8  
Water Slides

|  | Inspection Fee |
|--|----------------|
| Each additional water slide into a plunge pool   | \$75           |
| Water slide into a swimming pool                 | \$175          |
| Each additional water slide into a swimming pool | \$75           |

b. Multipool facilities. If more than one pool (swimming pool, water slide, wave pool, wading pool, or spa) is located within a fenced compound or a building, the inspection fee for the pools in the fenced compound or building shall be reduced by 10 percent. This reduction does not apply to the fees specified in Table 8.

c. Special inspection fee. When the inspection agency determines that a special inspection is required, i.e., a follow-up inspection or an inspection generated by complaints, the inspection agency may charge a special inspection fee which shall be based on the actual cost of providing the inspection.

d. Penalty. Unpaid inspection fees will be considered delinquent 45 days after the date of the bill. A penalty of \$30 per month or fraction thereof that the payment is delinquent will be assessed to the owner for each pool inspected.

**15.12(4) Plan review fees.**

a. New construction. A plan review fee as specified in Tables 9, 10 and 11 shall be submitted with a construction permit application for each body of water in a proposed facility. If

two or more pools share a common recirculation system as specified in 15.5(5)“a,” the plan review fee shall be 25 percent less than the total plan review fee required by Tables 9, 10 and 11.

Table 9  
Swimming Pools, Wading Pools and Wave Pools

| Swimming Pool Area (ft <sup>2</sup> ) | Plan Review Fee |
|---------------------------------------|-----------------|
| less than 500                         | \$165           |
| 500 to 999                            | \$275           |
| 1000 to 1999                          | \$385           |
| 2000 to 3999                          | \$550*          |
| 4000 and greater                      | \$825*          |

\*This may include one water slide.

Table 10  
Water Slides

| Description   | Plan Review Fee |
|---|-----------------|
| Water slide and dedicated plunge pool                           | \$550           |
| Each additional water slide into a plunge pool or swimming pool | \$165           |

Table 11  
Spas

| Spa Volume (gal) | Plan Review Fee |
|------------------|-----------------|
| less than 500    | \$165           |
| 500 to 999       | \$275           |
| 1000 +           | \$385           |

b. Reconstruction. The plan review fee for reconstruction is \$250 for each swimming pool, spa or bathhouse altered in the reconstruction.

c. Penalty for construction without a permit. Whenever any work for which a permit is required has been started before a permit is issued, the plan review fee shall be 150 percent of the fee specified in 15.12(3)“a” or “b.” The department may require that construction not done in accordance with the rules be corrected before a facility is used.

Exception: After receiving a construction permit application, the department may authorize preliminary construction on a project to start before issuance of a permit. The authorization shall be in writing to the owner or the owner’s authorized representative.

**15.12(5) Training fees.** The course sponsor for a training course designed to fulfill the requirements of 641—15.11(135I) shall pay to the department a fee of \$20 for each person who

successfully completes the course. The fee is due within 30 business days of the completion of the course.

**641--15.13(135I) 28E agreements.** A city, county or district board of health may apply to the department for authority to inspect swimming pools and spas and enforce these rules.

**15.13(1) Application and review process.** Applications shall be made to the Iowa Department of Public Health, Swimming Pool Program, Lucas State Office Building, 321 East 12<sup>th</sup> Street, Des Moines, Iowa 50319-0075.

**15.13(2)** Each application shall include, at a minimum:

a. A commitment that inspectors will meet the educational requirements of 641—15.11(135I). A person who is a registered sanitarian (R.S.) or a registered environmental health specialist (R.E.H.S.) with the National Environmental Health Association shall be considered to have met the educational requirements of subrule 15.11(2).

b. A statement of the ability of the board of health to provide inspections of all swimming pools and spas within the contracted area.

c. A statement of the ability of the board of health to follow enforcement procedures contained in subrule 15.6(2).

**15.13(3)** If the department approves the application, the 28E agreement shall be perpetual, subject to the conditions set forth by both parties. The agreement shall include the terms and conditions required by Iowa Code chapter 28E and any additional terms agreed to by the parties.

**641--15.14(135I) Application denial or partial denial--appeal.**

**15.14(1)** Denial or partial denial of an application shall be done in accordance with the requirements of Iowa Code section 17A.12. Notice to the applicant of denial or partial denial shall be served by restricted certified mail, return receipt requested, or by personal service.

**15.14(2)** Any request for appeal concerning denial or partial denial shall be submitted by the aggrieved party, in writing, to the department by certified mail, return receipt requested, within 30 days of the receipt of the department's notice. The address is Iowa Department of Public Health, Swimming Pool Program, Lucas State Office Building, 321 East 12th Street, Des Moines, Iowa 50319-0075. Prior to or at the hearing, the department may rescind the denial or partial denial. If no request for appeal is received within the 30-day time period, the department's notice of denial or partial denial shall become the department's final agency action.

**15.14(3)** Upon receipt of an appeal that meets contested case status, the appeal shall be forwarded within five working days to the department of inspections and appeals, pursuant to the rules adopted by that agency regarding the transmission of contested cases. The information upon which the adverse action is based and any additional information which may be provided by the aggrieved party shall also be provided to the department of inspections and appeals.