

## City of North Richland Hills Consumer Health Requirements for Plan Review: Public Swimming Pools/Spas/PIWFs

The purpose of this document is to help swimming pool design professionals/contractors understand the Consumer Health requirements to receive a building permit, pass construction inspections, and pass final requirements to receive an operating permit for public swimming pools/spas in the City of North Richland Hills, Texas.

NRH Consumer Health will use the checklist provided after this section to evaluate submitted plans and throughout the construction process. While we have made an effort to be comprehensive, the checklist is not all-inclusive and design professionals/contractors should refer to the actual rules and regulations for clarification. For public swimming pools, these include:

- [2018 International Swimming Pool/Spa Safety Code \(2018 ISPSC\)](#);
- [NRH Amendments to the 2018 ISPSC](#);
- [25 Texas Administrative Code 265 Subchapter L \(Texas State Pool Rules\)](#);
- [25 Texas Administrative Code 265 Subchapter M \(Texas PIWF Rules\)](#);
- [NRH Aquatic Facilities Ordinance](#);
- [Texas Health and Safety Code, Title 9, Subtitle A, Chapter 757](#)
- [CDC Model Aquatic Health Code \(Cyanuric Acid Rules\)](#)

Design professionals and contractors should also refer to [this guidance bulletin](#) by NRH Building Inspections.

Swimming pool contractors should work closely with both NRH Consumer Health and NRH Building Inspections during the plan review and construction processes. Both NRH Consumer Health and NRH Building Inspections will need to complete construction inspections during the construction process. NRH Building Inspections can be reached at 817-427-6300 or [nrhpi@nrhtx.com](mailto:nrhpi@nrhtx.com).

NRH Consumer Health completes the following inspections during the construction process:

- **Pre-gunite Inspection:** Generally, NRH Consumer Health verifies light/skimmer/return inlet placements and proper drain installation.
- **Pre-plaster Inspection:** Generally, NRH Consumer Health verifies proper step/tile/depth measurements, location and function of the emergency phone, fencing detail and compliance, safety equipment/signage
- **Preliminary Inspection:** Occurs at least 7 days before construction is completed. NRH Consumer Health will perform a full pool inspection to address any issues that must be resolved prior to the final inspection.
- **Final Inspection:** This is the final construction inspection for the facility. NRH Consumer Health will perform a full pool inspection, including checking water chemistry.

A pre-construction letter (submitted with the plans) and a post-construction letter (submitted by engineer at end of construction process) must be submitted, signed, and sealed by the licensed engineer. A template of this letter with a list of the necessary calculations and certifications may be found here: <http://nrhtx.com/DocumentCenter/View/4944>

Contact NRH Consumer Health at 817-427-6650 or [consumerhealth@nrhtx.com](mailto:consumerhealth@nrhtx.com) with any questions

# City of North Richland Hills Consumer Health Department Plan Review Checklist for Public Swimming Pools/Spas

<http://nrhtx.com/aquaticfacilities>

**Notes:**

We have made an effort to provide as complete a checklist as possible, but this checklist is not comprehensive. Refer to the actual code. Contact NRH Consumer Health at 817-427-6650 or [consumerhealth@nrhtx.com](mailto:consumerhealth@nrhtx.com) with any questions.

Some items of concern may be caught early if these items are inspected at the time of the Pre-Plaster inspection. Thus, some items listed to be inspected at Pre-Plaster may need to be inspected at Preliminary at discretion of inspector.

<b>CONSTRUCTION INSPECTIONS/PERMITTING PROCESS</b>	<b>DATE</b>
Copy of approved plans/specifications kept on site during the time of construction	
Static hydraulic pressure test completed prior to deck pour.	
Building/Consumer Health inspections completed prior to gunite application/cement pour.	
Before gunite pour, temporary or permanent fencing required to isolate excavation	
Permanent, non-climbable, compliant fencing required before pre-plaster	
Post-gunite/pre-plaster inspections complete	
Pre-permit inspection (after plaster)	
Submitted engineer's Post-Construction Certification Letter, signed and sealed	
Plumbing schematic posted in equipment room, written operational instructions provided	
Final construction approved and permit secured prior to operation.	

<b>PLANNING MATERIALS</b>	<b>Sec. 265.183 page 19 NRH Ordinance</b>	<b>Initial Plan Submittal</b>
Where there are conflicts between codes, the more restrictive code applies.		
Plans and specifications submitted for Building/Health/Fire review/approval.		
Submittal includes plan of entire project site/tract map, details of nearby structures		
Submittal includes plot plan, deck detail, pool enclosure detail, fence/gate/hardware details		
Submittal includes plumbing detail including riser diagram, gauges, pipe details, drains, etc.		
Submittal shows details for fill line, hose bibs, backflow prevention devices		
Submittal includes pool/spa structure details, entry/exit details		
Submittal includes details on depth markers, lights (in/out of pool), skimmers, returns, coping		
Submittal includes complete list of equipment with make/model numbers or specifications		
Submittal includes details on safety equipment, emergency phone, and signage		
Plans/specifications submitted and stamped with seal of a professional engineer		
Submittal includes engineer's Pre-Construction Certification Letter, signed and sealed		
No construction activity until Building/Health/Fire Depts approve plans.		

<b>GENERAL CONSTRUCTION AND DESIGN</b>	<b>Sec. 265.184 page 13-19 2018 ISPSC</b>	<b>Plans</b>
Interior surfaces shall be smooth, watertight, easily cleanable, non-toxic, durable		
Industry standard materials used for pool/spa construction (See page 14 of State Rules)		
NSF Standard 50 conformance proven for equipment		
Earth not permitted as interior basin finish. Sand use meets reqs. on page 15 of State Rules.		
Interior surface colors and finishes at least 6.5 or lighter on Munsell scale		
Colors/patterns/finishes shall not obscure objects/surfaces within the pool/spa		
Pools/Spas/Appurtenances designed to protect against damage from freezing		
Hydrostatic relief valve or system installed to prevent damage from ground water		
Interior footing surface shall be slip-resistant		
Basin design free of entrapment and other hazards.		
2018 ISPSC 323.3 Obstructions and entrapment avoidance. Prohibits obstructions that may cause entrapment/injury. Details that types of entrapment include, but are not limited to, wedge or pinch-type openings and rigid, nongiving cantilevered protrusions.		
Pool shall be built in accordance with permitted construction tolerances		
Pool/spa shall be designed to meet anticipated user loads (see page 18 of State Rules)		

<b>GENERAL CONSTRUCTION AND DESIGN (CONTINUED)</b>	<b>Plans</b>
Walls intersect floor at angle/transitional radius.	
At depths ≤ 3 ft, transitional radius <6", tangent to wall, tangent/intersect floor	
Slope of floor in depth <5 ft. shall not exceed 1 foot in 10 feet to point of 1 <sup>st</sup> slope change	
Slope of floor in depth ≥5 ft. shall not exceed 1 foot in 3 feet	
Slope of floor may vary in limited areas where access for persons with disabilities provided	
Slope of floor for spa shall not exceed 1:12. Depth change indicated on multilevel floors.	
Floor slope in only Class A pools determined by the accrediting authority for competition	
Visual separation (4 inch band) for water < 3 ft. in depth from deeper areas.	

<b>VANISHING EDGE</b>	<b>Sec. 265.184 page 19</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Vanishing edge overflow trough/basin/capture drain not counted as a skimmer			
Skimmers not required when 100% of pool/spa is vanishing edge			
Shall not exceed >50% or entire perimeter unless pool surrounded by approved deck			
No part of the vanishing edge >15 ft. distance from deck			
Designed to overflow into a trough/basin/capture drain			

<b>UNDERWATER SEATING</b>	<b>Sec. 265.184 page 19-20 2018 ISPSC</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Horizontal surface not greater than 20" below design water level			
Unobstructed seating surface, minimum 10" depth			
Seating surface not less than 24" width			
Located outside diving envelope			
Visually separated by 1-inch solid or broken stripe.			
Must have a slip-resistant surface			
Shall not be used as required entry/exit access			
2018 ISPSC 411.5.2 Horizontal surfaces underwater seat/benches shall be at/below waterline.			

<b>WATER LOUNGES</b>	<b>Sec. 265.184 page 20, 2018 ISPSC</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Designed as a water lounge or sunning area and not as a wading pool			
Minimum 20" wide			
Minimum 10 sq. ft. of horizontal surface			
Join pool wall over distance ≥ 3 feet.			
Depth 2-12 inches below water level			
Visually set apart by a 1-inch solid or broken stripe on leading edge of bench, contrast color			
Located outside of diving envelope			
Have slip-resistant surface			
Be located in shallow areas of the pool only			
2018 ISPSC 411.5.2 Horizontal surfaces underwater seat/benches shall be at/below waterline.			

<b>UNDERWATER TOE LEDGES/REST LEDGES</b>	<b>Sec. 265.184 page 20-21</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Must be slip-resistant			
Only provided in water ≥5 ft. and at least 4 ft. below water level			
Visually set apart by a 1-inch solid or broken stripe on leading edge of bench, contrast color			
Uniform horizontal tread depth of 4-6"			

<b>BULKHEADS</b>	<b>Sec. 265.184 page 22</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Cannot encroach on required clearances of other features such as diving boards.			
If operated with open area underneath, users prevented from swimming underneath			

<b>ISLANDS AND BRIDGES</b>	<b>Sec. 265.186 page 25</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Island <18" width not designed for walking on has no user accessible stairs/ladders/bridges			
Island designed to be walked on by lifeguards, minimum 18" width entire length of island			
Island not designed/intended for walking on by users—signs stating "No Entry", 2" letters			
Island designed for pool/spa users accessible by bridge/ramp/ladder/stairway			
Bridges have minimum clearance of 7' from bottom of pool and 4' above water surface			
Bridges/ramps has minimum 42" high barrier on both sides of bridge/ramp			
Demarcation tile minimum 4" height, on top 4.5" of island wall just under coping			

<b>DECKS</b>	<b>Sec. 265.185 pages 22 2018 ISPSC</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Entries/exits/walkways/decks/etc. comply with accessibility/disability access laws.			
2018 ISPSC 406.2 Deck or unobstructed access must be provided for ≥90% of pool perimeter. (More restrictive than 35% allowance for other structures in State Pool Code. More restrictive standard applies.)			
Concrete installed compliant to ACI Standard 302.1R-15, local building codes, engineering			
Non-concrete decks designed/installed in accordance with good public health engineering practice and local building codes			
Decks/ramps/coping/steps/etc shall be slip resistant			
Continuous and unobstructed circulation path providing in conformance with ADA			
Pool/spa deck may serve as part of the circulation path			
Decks between pools/spas must have minimum width of six feet			
Class A pool decks must conform to sanctioning body's requirements.			
Class B pool decks - ≥ 6 ft. wide, unobstructed			
Class C pool/spa decks - ≥ 6 ft. wide, unobstructed			
Diving Platforms/Structures/Etc.—unobstructed deck - ≥ 4 ft. wide			
Decks shall be sloped to drain to perimeter areas or to deck drains			
Drainage slopes for deck surfaces in compliance with 25 TAC 265.185(f)(9) (see page 24)			
2018 ISPSC 306.5: Minimum slope of travertine/brick-set pavers for public pools is 3/8".			
Drainage removes water without leaving 1/8" standing water after 20 minutes			
Maximum gaps between decks/walkways/adjoining decks ≤ 3/4"			
Difference in vertical elevation between deck and circulation path ≤ 1/4"			
Isolation joints provided/installed to be water tight/prevent damage/in compliance with rules			
Edges of decks shall be radiused, tapered, or designed to eliminate sharp corners			
Deck step risers shall be uniform, height 3 3/4" to 7 1/2" , tread distance ≤11"			
Decks with 3 or more risers shall be provided with a handrail			
Valves/etc. under decks accessible/provided with slip-resistant, secured access cover(s)			
Hose bibs with backflow prevention provided for rinsing entire deck, not >150 feet apart			
Water powered equipment shall have dedicated hose bib water source or valve			
No landscaping/planters permitted on pool or spa decks			

<b>ENTRY/EXIT</b>	<b>Sec. 265.187 pages 25-27</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Minimum 2 entry/exits: 1 at shallow end, 1 at deep end.(Some exceptions—see pages 25-26)			
Spas required to have minimum of one entry/exit.			
Figure 25 TAC 265.187(b) shows Entry/Exit Locations for Specific Pools (see page 26)			
Entry/exit structures and devices for persons with disability not counted.			
Areas with water depths ≤24" considered natural entry/exit, except wading pools			
Pools with water depth >24", entry/exits ≤75 ft. travel distance from other entry/exits			
Exemption for 1 entry/exit if depth<5', entry/exit 75% length of longest wall (see page 26-27)			
Deep end entry/exits must be steps/stairs/ladder/grab rails with recessed treads/ramps/beach entry/swimout meeting requirements			
If deep end is >30' wide, entry/exit required on each side and ≤82' linear feet apart			
Entry/exits and other features must be located outside of diving envelope			
Stairs, steps, ladders, and recessed treads shall have slip-resistant surfaces			

<b>BEACH/ZERO-DEPTH/SLOPING ENTRY/EXIT</b>	<b>Section 265.187 page 30</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Exceptions for beach entries in wave/surf/vortex/activity pools, PIWFs, and leisure rivers			
Slopes of beach entries used as required entry/exits shall not exceed 1:12			
For benches: vertical riser height shall not exceed 12 inches			
For steps: Must be compliant with rules for steps			
Trench drains required at waterline to facilitate surface skimming, flat or follow slope of entry			

<b>ENTRY/EXIT IN SPECIAL POOLS</b>	<b>Section 265.187 pages 30-31</b>	<b>Plans</b>	<b>Pre-Plaster</b>
See Figure 25 TAC 265.187(b) on page 26 of State Pool Rules			
Read specific details for entry/exit rules for these pools on pages 30-31 of State Pool Rules			

<b>STEPS/STAIRS</b>	<b>Section 265.187 page 27-28 NRH Ordinance Amends 2018 ISPSC</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Tread depth (horizontal run) ≥ 10 inches, unobstructed			
Tread width ≥ 24 inches, unobstructed surface area ≥240"			
Riser height ≤ 12 inches (bottom riser may taper to zero)			
Vertical distance from coping/deck/etc. to uppermost tread ≤12"			
If stairs in water depths >48", lowest tread lower than 48" below deck, recessed into wall			
Solid/broken visible contrasting warning strip (1 inch) underwater steps, slip-resistant			
Step handrails required at any pools with lifeguard mandate.			
Handrails corrosion-resistant, cannot be removed without tools; treads slip-resistant			
Gutters can act as a step if gutter has grating/cover and is fully compliant			

<b>HANDRAILS</b>	<b>Section 265.187 page 28-29</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Handrails compliant with federal/state/local requirements for accessibility			
Top gripping surface of handrails 34-38" above ramp/step surface			
Leading edge of handrails for stairs/entries/exits within 18" of vertical face bottom riser			
Outside handrail diameter from 1.25-2 inches			

<b>LADDERS</b>	<b>Section 265.187 page 29</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Corrosion-resistant, anchored securely to deck, bonded in accordance with NEC			
Handrail on each side of ladder treads.			
Ladder handrail distance is between 17 inches to 24 inches.			
Uniform distance between ladder treads is 7 inches to 12 inches.			
Maximum vertical distance from coping to top tread is 12 inches.			
Ladder step tread minimum horizontal depth of ≥2 inches.			
Wall clearance between pool/spa wall and ladder 3-6 inches			
Ladder treads slip-resistant			

<b>RECESSED TREADS</b>	<b>Section 265.187 page 28-29 2018 ISPSC</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Maximum vertical distance from coping to top tread is 12 inches.			
Step depth ≥ 5 inches.			
Step width ≥ 12 inches.			
Uniform vertical spacing of 7-12" between treads, measured from centerlines			
Slip-resistant, easily cleaned, drain into the pool or spa.			
2018 ISPSC 322.4.3 Handrails and Grab Rails for Recessed Treads—Shall be provided, one on each side of the treads. Clear distance between handrails/grab rails 17-24"			

<b>STARTING PLATFORMS</b>	<b>Section 265.187 page 30</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Located at water depth of ≥5 ft. or meet requirements of accrediting body for competition			
Platforms intended for non-sanctioned events be located at water depth of ≥4.5 ft.			
Platforms at Class A pools comply with requirements of accrediting body for competition			
Tread surfaces of platforms slip-resistant			
Platforms installed/secured per manufacturer's instructions			
Only used during competition or when direct supervision from coach/qualified instructor			
Removed or secured when use is not directly supervised			

<b>SWIMOUTS</b>	<b>Section 265.187 page 29-30 2018 ISPSC NRH Ordinance</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Located completely outside water current/wave action			
Unobstructed horizontal surface, horizontal depth of ≥11 inches			
Unobstructed surface area of tread ≥240 inches			
If used as entry/exit, steps compliant with rules for steps			
2018 ISPSC 411.5.1 Horizontal surface shall not be >20 inches below waterline.			
NRH Ordinance: The leading edge shall be visibly set apart and provided with a horizontal solid or broken stripe at least 1 inch wide on the top surface along the front leading edge of each step. This stripe shall be plainly visible to persons on the pool deck. The stripe shall be a contrasting color to the background on which it is applied, and the color shall be permanent in nature and shall be a slip-resistant surface.			

<b>WADING POOLS</b>	<b>Sec. 265.184 page 21-22 2018 ISPSC</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Maximum depth no greater than 18 inches.			
15 ft. setback from shallow end of pool or enclosed by fencing.			
35 ft. setback from deep end of pool or enclosed by fencing.			
Clear visibility through barrier required if enclosed by fencing.			
No submerged suction outlets. Skimmers/overflow gutters handle 100% circ. flow rate			
If edge has areas >9" depth, those areas not considered entry/exits			
If edge has areas >9" depth, floors shall be uniform, slip-resistant, max slope 1 foot/12 feet			
If edge has areas >9" depth, vertical distance from deck/walkway to pool bottom ≤18"			
If edge has areas >9" depth, slope of zero level deck entries shall not exceed 1 foot/12 feet			
2018 ISPSC 405.5 Wading Pools—Distance from top of deck to waterline must be ≤6"			

<b>DIVING FACILITIES</b>	<b>Sec 265.187 page 31-36 NRH Ordinance 2018 ISPSC</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Many specific rules and diagrams for this—see pages 31-36 of State Pool Rules, 2018 ISPSC, and <a href="#">amendments to 2018 ISPSC under NRH ordinance</a>			
2018 ISPSC 406.8.5 Guardrail provided for diving equipment >39" in height			

<b>WATERSLIDES AND FLUMES</b>	<b>Sec 265.187 pages 36-37 Sec 265.209 pages 82-84</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Installed according to manufacturer's instructions/licensed engineer's specifications			
Planned and designed by a licensed engineer if not pre-manufactured			
Slides must meet ASTM F2375-17a and ASTM F2461-16e1			
Slide runouts and drop slide pools must meet ASTM F2376-17a			
Shall comply with Texas Occupations Code, Chapter 2151, if applicable			
Shall comply with CPSC Standard for Swimming Pool Slides in Title 16 CFR 1207			
Flumes made of inert, non-toxic, smooth, easily-cleaned surfaces.			
Flume valleys and dips have proper drainage			
Flume valleys and dips have safety measures to ensure rider cannot fall from the flume			
Flume valleys and dips have a means of egress if ride malfunctions/rider stops on slide			
Slide exit system designed for safe entry to landing pool/runout that meets ASTM F2376-17a			

<b>WATERSLIDES AND FLUMES (CONTINUED)</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Landing pool steps/recessed steps installed at opposite end of pool from flume exit		
Landing pool steps/recessed steps provided with handrail offset from the slide.		
If waterslide flume ends in a pool, landing area divided by float line/wing wall/peninsula/etc. to prevent collisions with other bathers.		

<b>WAVE POOLS</b>	<b>Sec 265.209 page 83</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Beach entry required with exception of ADA designated entry point			
Recessed steps not allowed along walls			
Must be fitted with rope/float line to restrict access to caisson wall if manufacturer requires			
Typical float lines to separate shallow/deep ends of pool not required for wave pools			
Minimum two emergency shutoffs required to disable wave action, one on each side of pool			
Deck depth markers not required for wave pools			
Caisson barriers required, shall have no openings that allow passage of a 4" sphere			

<b>LEISURE POOLS</b>	<b>Sec 265.209 pages 83-84</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Handrails for steps/propulsion jets shall not protrude into the leisure river			
Obstructions allowed on deck if they do not impact lifeguarding/sight lines/rescue operations			
Bridges spanning leisure rivers have minimum clearance of 7' from bottom of river and 4' above water surface to any structure overhead			
Depth markers required at all entry/exits to leisure river but not along, in the landscape, where there is no deck, or in the channel			
May have limited entry/exit access to the water for users, do not require entry/exit every 75 ft.			

<b>MOVABLE FLOOR POOLS</b>	<b>Sec 265.209 pages 83-84</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Planned/Designed by licensed engineer			
Use of starting platforms prohibited when water depth <5 feet			
When installed in diving pool, diving prohibited if dimensions do not meet 265.188			
Surface of floor slip-resistant if intended for installation in water depths <5 feet			
Use of movable floor portion of pool not open to users when floor is being used or lowered			

<b>SURF POOLS</b>	<b>Sec 265.209 page 84-85</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Float line required to restrict access to the caisson wall if required by manufacturer			
Wave caisson barriers provided, do not allow passage of 4" sphere.			
If forced air used for waves, caisson barriers not required unless manufacturer recommends.			
Typical float lines to separate shallow/deep ends of pool not required for surf pools			
In addition to other required equipment, lifeguards provided with additional equipment to reach deepest area of surf pool during an emergency. This equipment accessible, labeled "For Lifeguard Use Only", available whenever surf pool is open and used for surfing.			
No surfer enters the surf pool unless tethered to the surf board, wearing a USCG-approved PFD, or a lifeguard is in the surf pool in the surfing area directly supervising surfing activity.			
Non-surfing users not allowed to enter surf pool wave areas >5 ft depth without USSC-approved PFD			
Access shall be at shallow or beach entry end with exception of ADA designated entry point			
Minimum two emergency shutoffs provided, clearly marked, readily accessible to lifeguards			

<b>SPAS</b>	<b>Section 265.208, pages 80-82 2018 ISPSC</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Maximum water depth for spas shall be 4 feet as measured from design water level			
Maximum water depth for exercise spas shall not exceed 6 feet 6 inches			
Maximum water depths of seats/sitting benches 28" from design water line to deepest point			
Spa decks minimum 6 feet wide, comply with all other requirements for decks			
Continuous, unobstructed deck provided for at least 50% of spa perimeter			
		<b>Plans</b>	<b>Preliminary</b>
Emergency shutoff switch to disconnect power to circulation/jet system pumps & air blowers			
Emergency switches accessible to users, within sight of spa, located 5-10 feet from spa			
2018 ISPSC 504.1.1 Alarms for Emergency Shutoff Switches. Emergency shutoff switches shall be provided with an audible alarm rated at not less than 80 decible sound pressure level and a light near the spa that will operate continuously until deactivated when the shutoff switch is operated.			
2018 ISPSC 508.1 Where an automatic controller is installed on a spa or hot tub for public use, the controller shall be installed with an automatic pH and an oxidation reduction potential controller listed and labeled in compliance with NSF 50.			
Air induction systems installed to manufacturer's specifications, to prevent electrical shock hazards, not permit introduction of toxic fumes or contaminants			
Air induction systems accessible for service, installed in accordance with the NEC/all codes			
If air blower/etc. is provided, manually operated timer switch located to require exiting of spa to reset. Timer shall operate spa blower/booster pump, shut off the pump in 15 min or when switched off			
Break-resistant thermometer designed for use in spa environment available for patrons/staff			
2018 ISPSC 509.4 Public facilities with a spa shall have a clock that is visible to spa users.			

<b>THERAPEUTIC POOLS/SPAS</b>	<b>Sec 265.209 page 84</b>	<b>Plans</b>	<b>Preliminary</b>
Therapeutic pools/spas with volume ≤1000 gallons must have turnover rate of ≤ 30 minutes			
Planned/designed by licensed engineer if design characteristics vary			

<b>CIRCULATION SYSTEM (GENERAL)</b>	<b>Section 265.187 pages 37-41</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Wading pools and spas have separate and independent filtering systems			
Circulation system components accessible for inspection/repair/replacement			
Circulation system components installed to manufacturer's specifications			
Equipment and piping installed to manufacturer's instructions			
Complete, easily readable schematic of circulation system posted in pump room			

<b>TURNOVER</b>	<b>Sec 265.187 pages 37-38</b>	<b>Pre-Construction</b>	<b>Post-Construction</b>
Turnover rate for Class A/B/C pools—1.5 times average depth, not to exceed 6 hours			
Turnover rate for spas—30 minutes			
See Figure 25 TAC 265.190(c)(1), page 38 of State Pool Rules, special pools turnover rates			
When existing pools/spas renovated, they must comply with new turnover rates.			

<b>FLOW VELOCITY</b>	<b>Sec 265.193 (n) pages 45-46</b>	<b>Pre-Construction</b>	<b>Post-Construction</b>
Return line water velocity must be <8 ft. per second (some exceptions—see pages 45-46)			
Maximum suction system flow rate—in accordance with ANSI/APSP/ICC-7 &ANSI/APSP-16			



<b>PIPING, GAUGES, FLOW METERS, VALVES</b>	<b>Sec. 265.187 page 36</b>	<b>Plans</b>	<b>Pre-Gunite</b>
Static hydraulic pressure test required before deck is poured and maintained throughout pour. Air pressure testing prohibited.			
Piping/fittings listed/labeled to comply with NSF 14/code standards and properly installed.			
Piping capable of complete drainage or evacuation. (freeze damage)			
		<b>Plans</b>	<b>Preliminary</b>
Gauges: pump suction, filter inlet, filter outlet.			
Flow meter(s) provided for filter flow during filtering			
Labeled circulation piping with function and flow direction.			

<b>FILTERS, BACKWASH</b>	<b>Sec. 265.188 page 37-38</b>	<b>Plans</b>	<b>Preliminary</b>
Filtration required for all pools/spas that recirculate water			
Wading pools and spas have separate and independent filtering systems			
Filter meets ANSI/NSFI Standard 50 requirements, using appropriate filter media			
Filter is properly designed/installed for pool/spa.			
Pressure-type filters must have means provided to release internal pressure.			
Filter equipped with automatic and manual air release devices.			
Filter operating parameters/instruction plate affixed to unit.			
Separation tanks with filter tanks have manual air release, lid allowing for slow/safe release			
Filters/separation tanks with operation/maintenance instructions permanently installed			
Observable free fall or sight glass on backwash piping.			
Sight glasses are removable for cleaning, if used.			
Filters designed for backwashing, used and maintained to manufacturer instructions.			

<b>PUMPS AND MOTORS</b>	<b>Sec. 265.189 pages 38-39</b>	<b>Plans</b>	<b>Preliminary</b>
Pump not operated under unsafe conditions.			
Pump certified/listed/labeled with NSF Standard 50, installed to manufacturer's instructions			
Pump motor sized to meet filter flow rate requirements.			
Strainer installed upstream of pump.			
Pump motor properly designed/installed.			
Pumps/motors accessible for inspection and service			
Shut off valves installed for pump removal if below pool elevation.			
Motors shall comply with UL requirements.			
Motors able to operate at 90-110% nameplate rating voltage load			
Thermal/current overload protection required			

<b>GENERAL SUCTION OUTLETS AND COVERS</b>	<b>Sec. 265.190 page 39-44</b>	<b>Pre-Construction Or Plans</b>	<b>Post-Construction or Final</b>
Designed to protect against suction entrapment, entanglement, and evisceration.			
Fully submerged suction outlets not required, skimmers not considered suction outlets			
Approved suction outlet covers/grates/fittings/components, to ANSI/APSP-16 & ANSI/ APSP-7			
Cover is stamped or specifications submitted showing compliance/maximum flow rate			
Flow rate through fitting/cover/grate $\leq$ approved stamped flow rate if one outlet blocked			
Special rules for wading pools/pools with depth of $\leq 24"$ (see page 43 of State Pool Rules)			
Special rules for field-fabricated suction outlets and sumps (see page 44 of State Pool Rules)			
		<b>Plans</b>	<b>Pre-Gunite</b>
Single submerged suction outlet not allowed.			
Dual/multiple suction outlets provided, hydraulically balanced.			
Suction outlets located at least 3 feet apart			
No means of isolating suction outlets allowed that would allow single suction outlet			
Pipes that serve two or more suction outlets may have shut off valve			
		<b>Plans</b>	<b>Preliminary</b>
SVRS/APSS operated/tested/maintained to manufacturer instructions, Records kept 2 years			

<b>VACUUM OUTLETS</b>	<b>Sec. 265.190 page 42</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Vacuum outlets installed $\leq 12$ " below water level			
Vacuum outlets protected by self-locking, self-closing cover, can't be opened by pool users			
Vacuum outlets in skimmers not required to have a separate cover			

<b>RETURN INLETS</b>	<b>Sec. 265.190 page 43</b>	<b>Plans</b>	<b>Pre-Gunite</b>
Pools--1 return inlet for every 300 square feet ft <sup>2</sup>			
Spas—1 return inlet for every 250 ft <sup>2</sup> , minimum 2 inlets			
Return inlets designed not to create a hazard			
Wall return inlets must not project more than 1 inch beyond wall			
Wall return inlets shall be at least 12 inches below the water level.			
Floor return inlets shall be flush with floor.			

<b>SKIMMER/GUTTER SYSTEMS</b>	<b>Sec. 265.191 page 44-47 2018 ISPSC</b>	<b>Plans</b>	<b>Pre-Gunite</b>
Skimmers/Gutter systems designed and installed hazard free.			
Skimmer equalizer lines prohibited, skimmers vented to atmosphere via openings in lid			
Skimmers provided one per 500 ft <sup>2</sup> for pools.			
Surface skimming system required, listed/labeled, designed to be effective			
Skimmer covers securely seated, slip-resistant, to withstand normal use, not tripping hazard			
		<b>Pre-Construction</b>	<b>Post-Construction</b>
Surface skimming system required, listed/labeled, designed to be effective			
Exceptions for surface skimming system requirement on page 46-47 of State Pool Code			
Skimmer system capable of 100% of circulation system flow.			
Gutter systems provided for $\geq 50\%$ of pool perimeter.			
Pool gutter system surge capacity $\geq$ one gallon per ft <sup>2</sup> pool surface area.			
Spa gutter system surge capacity $\geq$ two gallons per ft <sup>2</sup> spa surface area.			
2018 ISPSC 308.4 Design waterline $\pm 1/4$ " with adjustable weir skimming surface systems, $\pm 1/8$ " with nonadjustable skimming surface systems			

<b>ELECTRICAL REQUIREMENTS</b>	<b>NRH Ordinance Sec. 265.195 page 47-49</b>	<b>Building Inspections</b>
Electrical equipment installed per NEC (2017) and other relevant codes		
Electrical system must be installed/repaired/replaced/maintained by licensed electrician		
Electrical equipment design UL or equivalent approved.		
Equipment/components installed in compliance with manufacturer's instructions		
GFCI protection on lighting		
GFCI protection of all plugs in pool/spa yard enclosure		
GFCI protection on all outlets in dressing or sanitary facilities		
GFCI and circuit breakers shall comply with 2017 NEC code		
Pump motors both internally and externally grounded		
Pools bonded in accordance with 2017 NEC or with UL 1563 as applicable		
Plastic coated rebar prohibited		
Electrical conduits shall not enter or sealed/inert inside interior chemical storage spaces		
Lights protected against breakage inside interior chemical storage spaces		
Overhead lines elevated over pool/spa in compliance with NEC and NESC		
Electrical disconnect within sight of equipment and $\geq 5'$ from pool/spa walls		

<b>LIGHTING</b>	<b>Sec. 165.196 pages 49-51</b>	<b>Plans</b>	<b>Preliminary</b>
Artificial lighting required 30 minutes before/after sunrise if open in dark			
Lighting must illuminate bottom of pool/suction outlets, enable lifeguard visibility			
Adequate illumination from artificial lighting to pass Secchi disk test			
Pool and spa deck lighting required, listed/labeled/installed to NFPA 70 and NEC			
Outdoor pools must meet at least 10 horizontal foot-candles/108 lux at pool water surface			
Indoor pools must meet at least 30 horizontal foot-candles/323 lux at pool water surface			
Deck area must meet at least 10 horizontal foot-candles/108 lux at deck walking surface			
Underwater lighting in pools/spas at least 8 horizontal foot-candles/86 lux.			
For underwater lighting fixtures/lamps rated in watts, at least 0.5 watts/ft <sup>2</sup> required			
Certain exceptions for underwater lighting			
Dimmable/color changing lighting allowed but lowest level must meet minimum requirements			
Emergency lighting required for pools/spas that operate in periods of low illumination (see page 51 of State Pool Rules)			
Security lighting must be sufficient to illuminate pool during low illumination/during closure			
Renovated pools/spas must meet new lighting requirements			

<b>HEATERS</b>	<b>Sec. 265.197 page 51-53</b>	<b>Plans</b>	<b>Preliminary</b>
Accessible on-off switch required, either integral/mounted on exterior/within 3' of heater			
On-off switch operation doesn't change thermostat setting, in addition to circuit breaker			
Gas-fired heaters not equipped with continuously burning ignition pilots			
Covers required for heated pools/spas unless 70% of heating energy from solar/heat pump			
Heaters/hot water storage tanks required to be UL listed to 25 TAC 265.197(e) on page 52			
Means shall be provided to monitor water temperature			
Public access to heater controls prohibited			
Solar thermal water heaters specifically installed/listed/labeled. Page 53 of State Pool Rules			
Heaters installed to manufacturer's specifications			
If manufacturer requires, automatic device installed to ensure pump continues to run after heater shuts off			
Fuel-fired and electric appliances for spas—special requirements, see page 53			
Heaters ≥ 200K BTU Texas Dept. of Licensing/Regulation certified.			
Water temperature of spa shall not exceed 104 degrees F			

<b>WATER SUPPLY</b>	<b>Sec. 265.197 page 51-53</b>	<b>Building Inspections</b>	
Water supply from approved source			
Private water supplies must meet certain requirements (see page 54 of State Pool Rules)			
		<b>Plans</b>	<b>Preliminary</b>
RPZ backflow preventer or approved air gap required on all fill lines for backflow prevention			
Over-the-rim fill spout: no trip hazard; ≤ 2" beyond edge of pool; pliant end-piece, air gap			
Hose bibs in enclosure must have vacuum breakers			

<b>FACILITY DRINKING WATER</b>	<b>Sec 265.195 page 54-55</b>	<b>Plans</b>	<b>Preliminary</b>
Drinking water fountain/bottled water/etc. provided and available for pool/spa users			
Faucet/spigot/sink does not fulfill drinking water requirements			
When drinking water not located in enclosure, sign with minimum 1" letters required in enclosure, visible to users, that states location of drinking water			

<b>WASTEWATER DISPOSAL</b>	<b>Sec. 265.196 page 55, 2018 ISPSC</b>	<b>Plans</b>	<b>Preliminary</b>
Backwash to approved sewage disposal system (i.e. sanitary sewer)			
No direct connection between pool/spa/equipment and sewage disposal system			
Backwash/drainage water discharged through approved air gap (minimum 2X pipe diameter)			
2018 ISPSC 320.2 Water salvage—backwash water not returned unless treated/approved			
Post treatment required for wastewater that does not meet sanitary sewer/stormwater discharge standards (i.e. diatomaceous earth, etc.)			
Wastewater/stormwater disposal must meet all other federal/state/etc. requirements			

<b>DISINFECTION EQUIPMENT, CHEMICALS, FEEDERS</b>	<b>Sec. 265.200 pages 55-57 Sec 265.205 pages 75-79 2018 ISPSC</b>	<b>Preliminary</b>	<b>Final</b>
Disinfectant with residual required			
Treatment chemicals certified/listed/labeled to approved standards/used properly			
Use of compressed chlorine gas prohibited			
Personnel trained, PPE provided, SDS sheets on-site/readily available			
Automated/remotely managed controllers for pool/spa disinfection and pH control required			
Disinfection equipment selected/installed for continuous and effective disinfection			
Disinfectant feed systems must have capacity to reach $\geq 5$ ppm Cl <sup>-</sup> for outdoor pools*			
Disinfectant feed systems must have capacity to reach $\geq 3$ ppm Cl <sup>-</sup> for indoor pools/spas*			
*Or bromine equivalent			
Hand distribution of chemicals prohibited while users are in the pool			
After hand distribution of chemicals, tests of disinfectant levels/pH required 30 minutes after distribution. No one may reenter pool/spa until levels are checked and within required range			
Chemical bulk/day tanks clearly labeled to indicate contents			
Chemicals and feed equipment stored so that pool/spa users do not have access			
Dry chemicals stored off floor or in waterproof containers in a dry room			
Dry chemicals protected from flooding/wetting from floors/walls/ceiling			
Chemical feeders must meet and be operated in compliance with NSF Standard 50			
Chemical feeders installed/maintained/operated in accordance with manufacturer instructions			
Chemical feeders installed so that chemicals introduced downstream from filter/heater; at a point lower than the heater outlet fitting or according to manufacturer instructions			
Failure-proof features installed so that chemicals cannot feed into pool/spa/equipment/etc if equipment or power fails			
Chemical feed pumps wired so they cannot operate unless adequate return flow to properly disburse chemical; regulated to ensure constant feed with varying supply backpressure			
Water treatment chemicals shall be EPA-registered for use in pools/spas under FIFRA			
See 25 TAC 265.206(b) for water quality criteria on pages 76-77 of State Pool Rules			
Cyanuric acid not allowed in indoor pools/spas or in therapy pools			
Alternate methods of disinfectant--see 25 TAC 265.207 on page 79 of State Pool Rules			
2018 ISPSC 508.1 Where an automatic controller is installed on a spa or hot tub for public use, the controller shall be installed with an automatic pH and an oxidation reduction potential controller listed and labeled in compliance with NSF 50.			

<b>HANDHOLDS</b>	<b>Sec. 265.201 page 57</b>	<b>Plans</b>	<b>Pre-Plaster</b>
If water depth $>42$ " and no seat or bench, swimout-installed handholds required			
Handholds not required for wave action pools, surf pools, and leisure rivers			
Handholds located $\leq 12$ " above design waterline, horizontally spaced $\leq 4'$ apart			
May be coping, rope, railing, rock, ledge, ladder, or stair step			

<b>FLOAT LINES AND FLOOR MARKINGS</b>	<b>Sec. 265.201 pages 58-59</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Transition point from shallow to deep shall have a 4-inch min. width row of floor tile, painted line, or similar means of color contrasting with bottom			
		<b>Plans</b>	<b>Preliminary</b>
NRH ordinance requires securely attached float lines to separate shallow/deep portions of pool at breakpoint depth at discretion of NRH Consumer Health			
Float lines required by State law for Class A pools not being used for competitive events and Class B pools. Optional for Class C, but NRH Consumer Health will probably require.			
Wave pools, surf pools, and waterslide landing pools exempted from providing float line			
Float line and buoys provided 1 to 2 ft. before 5-ft. depth point			
Float line buoys secured $\leq 7$ ft. apart.			
Float line must be tightly tensioned.			
Float line must provide good handhold and be durable.			
Float line wall anchors are recessed with no projection that creates a hazard.			

<b>DEPTH MARKERS</b>	<b>Sec. 265.201 pages 59-61 Sec. 265.209 pages 82-85 2018 ISPSC</b>	<b>Plans</b>	<b>Pre-Plaster or Preliminary</b>
Provided on deck and sidewalls.			
Indicate depth from water level to floor of pool taken 3 feet from pool wall.			
Depth markers and units of measurement (FT, IN, M) ≥ 4 inches letter height			
Units of measurement spelled “feet”, “inches”, “meters”, or abbreviated as “FT”, “IN”, “M”			
Must be of contrasting color			
2018 ISPSC 409.2.7 Depth markers distributed uniformly on both sides/both ends of the pool.			
Must be permanent. May be metal tiles/letters, ceramic tiles, engraved concrete with letters and numbers filled in with Lithochrome enamel paint.			
Must not be located on deck above entry/exits including steps, ladders, recessed treads, water lounges, and beach entries			
Provided at minimum and maximum water depths			
Provided at both sides and at each end of the pool			
Provided at all points of slope change			
Provided every 2 ft. of depth change			
Provided at least one every 25 feet of deck			
Deck depth markers slip-resistant, within 18” of water’s edge			
Pool sidewall markers posted in the top 4.5 in. of pool wall just under coping			
Positioned correctly (deck markers readable while standing on deck facing water, wall markers readable to users inside pool/spa)			
Sidewall markers not required of beach entry pool on the beach entry.			
Not required on wave pool or surf pool decks.			
Spas shall have at least two depth markers, uniformly placed, meet other requirements			
Depth marker rules for roll-out gutter pools—see page 60 of State Pool Rules			
Depth marker rules for vanishing edge pools—see page 60 of State Pool Rules			
Pools/spas with moveable floors and varied water depth—see page 61 of State Pool Rules			
Depth marker rules for leisure rivers—see page 83 of State Pool Rules			

<b>“NO DIVING” MARKERS—WORDS/SYMBOL</b>	<b>Sec. 265.201 page 61</b>	<b>Plans</b>	<b>Pre-Plaster</b>
“NO DIVING” words and international symbol marked on pool deck in contrasting colors			
Must be permanent, slip-resistant; diving symbol must be black or red on light background			
Must not be located on deck above entry/exits, including steps/ladders/recessed treads/water lounges/beach entries			
“NO DIVING” and international symbol (4 inch letters) on deck where water depth ≤ 5 ft			
Must be spaced at least every 25 feet of deck where water depth ≤5 ft			
At least 2 warnings including the “NO DIVING”/Intl Symbol provided at extreme ends of minimum depth and at extreme ends of maximum depth, or on each of the longer dimensional sides of the pool			
Within 18 inches of water’s edge and positioned correctly (readable when standing on deck facing the water)			
Deck “NO DIVING”/Symbol markers not required for spas.			
“NO DIVING” markers not required on interior tile line of pool/spa			
Located on permanent structures above the deck and within 5’ of water surface, unless structure is diving board/diving platform/ADA-compliant chair lift/slide flume/lifeguard stand/bridge			

POOL SIGNAGE REQUIREMENTS	Sec. 265.201 page 62-65 2018 ISPSC NRH Ordinance	Plans	Pre-Plaster
Securely mounted, durable, inside the pool enclosure, visible, legible, have distinct border			
Can be multiple signs or messaging combined on one sign			
Where majority non-English speaking, additional signs optional in predominant language			
Additional signage required at discretion of Neighborhood Services (NRH ordinance)			
<b>Following Signs in 4" Letters:</b>			
"WARNING - NO LIFEGUARD ON DUTY" (NA where lifeguards required/ provided)			
"NO DIVING" and international symbol. (State law: NA where lifeguards required/provided)			
2018 ISPSC 412.1 Safety signage advising on danger of diving in shallow areas provided as required by the authority.			
"IN CASE OF EMERGENCY, DIAL 911"			
<b>Following Signs in 2" Letters:</b>			
Precise location of pool on or with the emergency phone			
Maximum user load limit			
"PETS IN THE POOL/SPA ARE PROHIBITED"			
"DO NOT SWIM IF YOU HAVE BEEN ILL WITH DIARRHEA WITHIN THE PAST 2 WEEKS"			
"CHANGING DIAPERS WITHIN 6 FEET OF THE POOL IS PROHIBITED"			
"GLASS ITEMS NOT ALLOWED IN THE POOL YARD"			
"PERSONS UNDER THE AGE OF 14 MUST NOT BE IN THE POOL/SPA WITHOUT ADULT SUPERVISION"			
"EXTENDED BREATH HOLDING ACTIVITIES ARE DANGEROUS AND PROHIBITED"			
<b>Following Signs in 1" Letters</b>			
Hours of Operation			
Instructional signs for wave pools/slide pools/etc.			
Sign posted to identify emergency phone/summoning device (posted above)			
If drinking water not located in enclosure, sign to notify users of location of drinking water			
<b>Following Signs in Any Size Letters:</b>			
Clear operating instructions posted at emergency phone/summoning device			
Emergency shutoffs for pools clearly labeled			

SPA SIGNAGE REQUIREMENTS	Sec. 265.201 page 79-82 2018 ISPSC NRH Ordinance	Plans	Pre-Plaster
Securely mounted, durable, and visible from inside the spa enclosure, legible			
Can be multiple signs or messaging combined on one sign			
Where majority non-English speaking, additional signs optional in predominant language			
Additional signage required at discretion of Neighborhood Services (NRH ordinance)			
<b>Following Signs in 4" Letters:</b>			
"WARNING - NO LIFEGUARD ON DUTY" (NA where lifeguards required/ provided)			
"NO DIVING" and international symbol for NO DIVING." (State law not required where lifeguards required/provided. However...			
2018 ISPSC 412.1 Safety signage advising on danger of diving in shallow areas provided as required by the authority.			
2018 ISPSC 509.2 Operational signs for spas: ....5) No Diving			
<b>Following Signs in 2" Letters:</b>			
Precise location of spa on or with the emergency phone			
"EMERGENCY SPA SHUTOFF"			
"PERSONS UNDER THE AGE OF 14 MUST NOT BE IN THE POOL/SPA WITHOUT ADULT SUPERVISION"			
"PETS IN THE SPA ARE PROHIBITED"			
"DO NOT SWIM IF YOU HAVE BEEN ILL WITH DIARRHEA WITHIN THE PAST 2 WEEKS"			
<b>Following Signs in 1" Letters</b>			
Maximum User Load			
"DO NOT USE THE SPA IF THE WATER TEMPERATURE IS ABOVE 104 DEGREES FAHRENHEIT"			
Sign posted to identify emergency phone/summoning device (posted above it)			
If drinking water not located in enclosure, sign to notify users of location of drinking water			
<b>Following Signs in Any Size Letters:</b>			
2018 ISPSC 504.1.1 The following statements shall appear on a sign that is posted in a location that is visible from the spa: "Alarm indicates spa pumps off. Do not use spa when alarm sounds and light is illuminated until advised otherwise."			
2018 ISPSC 509.2 Operational signs for spas:			
(1) "Do not allow the use of or operate spa if the suction outlet cover is missing, damaged, or loose."			
(2) "Keep breakable objects out of the spa area."			
(3) "Spa shall not be operated during severe weather conditions."			
(4) "Never place electrical appliances within 5 feet of the spa."....			
2018 ISPSC 509.4 Clock must be visible to spa users.			

<b>SAFETY EQUIPMENT</b>	<b>Sec. 265.201 page 64, 67-68 2018 ISPSC</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Reaching poles/ring buoys/throw ropes visible/readily accessible from all areas of enclosure			
Shepherds crook: ≥12 ft long, non-conductive, non-telescoping pole.			
USCG Ring Buoy with attached rope ¼ to ¾" diameter.			
2018 ISPSC 409.2.4 Throwing rope must have length of 1.5X length of pool or 50 feet, whichever is less. (More restrictive than State code; more restrictive standard applies).			
Provide 1 set of safety equipment for every 2000 ft <sup>2</sup> water surface up to 6000 ft <sup>2</sup>			
After 6000 ft <sup>2</sup> , provide 1 additional set of safety equipment for each additional 4000 ft <sup>2</sup>			
2018 ISPSC 409.4.3 Class A/B/C required to have accessible first aid equipment, including first aid kit			
For facilities with lifeguards: backboards with 3 tie down straps/head immobilizer, enough for 2 min response			
For facilities with lifeguards: 24-item first aid kit meets OSHA standards			
For facilities with lifeguards: one portable AED kept in secure location, easily accessed			
For facilities with lifeguards: one BVM kept in secure location, easily accessed			
For facilities with lifeguards: platforms/stands required where water depth >5 ft, equipped with sunshade/umbrella that does not obstruct view of surveillance area			
For facilities with lifeguards: each lifeguard has uniform, rescue tube with rope/strap, whistle or signaling device, PPE including resuscitation mask with one-way valve/non-latex and non-powdered single-use disposable gloves in hip pack or attached to rescue tube			

<b>TELEPHONES/EMERGENCY SUMMONING DEVICES</b>	<b>Sec. 265.201 pages 64-65</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Minimum one emergency summoning device/phone			
Readily accessible, within 200 ft of water, functions when open/all times in operating season			
Clear operating instructions for use of device/phone posted			
Identifying sign posted above phone/device in minimum 1" letters			
Must not call on-site office (some exceptions for remote areas with trained staff-see page 65)			
Must contact 911 dispatch/24-hour emergency monitoring service/EMS			
Cell phones used as emergency phones labeled/ activated/ have permanent power supply			

<b>LIFEGUARD PERSONNEL STANDARDS</b>	<b>Sec 265.202 pages 65-68</b>	<b>Preliminary</b>	<b>Final</b>
Lifeguards required at Class A pools during competitive events			
Lifeguards required at Class B pools whenever the Class B pool is open			
Lifeguards required at any pool where user enters water from height above deck or wall			
Lifeguards required at any wave or surf pool			
Lifeguards required at any pool being used for recreation of youth groups			
Lifeguards not required at spas			
Minimum two lifeguards required			
Lifeguard staffing plan provides supervision/close observation of all users at all times			
Copy of lifeguard staffing plan available on-site, provided to inspector upon request			
Each lifeguard assigned surveillance area commensurate with ability/training/perspective			
Lifeguards not assigned duties that distract from lifeguarding			
Rotation procedure for lifeguards that provides sufficient break time			
Lifeguards have easy/quick access to rescue equipment			
Pre-season training program required			
"In-service" training of 60 minutes/every 40 hours of employment per lifeguard/staff			
Review of CDC standards for responding to fecal/vomit/blood contamination events			
Performance audits required as recommended by ARC/YMCA/Ellis/etc.			
Facility Emergency Action Plans required with specific info (see pages 66 and 67)			
All training reviewed/current/available to inspector within 3 business days			
Kept 3 years: Lifeguard's certifications including expiration dates, training details			



POOL YARD ENCLOSURES	Sec 265.203 pages 68-71 NRH Ordinance 2018 ISPSC	Plans	Pre-Plaster
<p>Enclosure required around all pools/spas, enclosure may surround multiple pools/spas</p> <p>Height ≥ 6 feet from the ground surface on the outside of the fence (NRH ordinance)</p> <p>Specific rules for wading pools enclosures—see pages 21-22 of State Pool Rules</p> <p>Class A, B, and Youth Camp Pools/Spas—see pages 68-29 of State Pool Rules</p> <p>Enclosures for pools/spas inside a building—see page 71 of State Pool Rules</p> <p>Constructed so persons must pass through gate/door to access pool/spa. Gates/doors exiting a pool/spa yard must open into public area/ walkway accessible by all users.</p> <p>Propping open gates prohibited.</p> <p>Service gates/doors must not be used as entry/exit, not required to be self-closing/self-latching, and must be kept securely closed/locked when not in actual use.</p> <p>See 2018 ISPSC 305.2.4 for rules about mesh fences as barriers.</p> <p>2018 ISPSC 305.2.8—rules for diagonal members in barriers. Maximum opening formed by diagonal members shall be &lt;1.75 inches. Angle of diagonal members shall be &lt;45 degrees.</p> <p>2018 ISPSC 3.5.10—Poolside barrier setbacks. The pool/spa side of the required barrier shall be ≥ 20 inches from the water’s edge.</p> <p>NRH Ordinance: Gates (including vehicular gates) equipped with electric closers and/or electric latches (including solar powered gates and latches) shall not serve as a barrier for restricting access to a pool or spa. (<a href="#">Exception—see ordinance</a>).</p>			
<i>Class C Apartments, Condominiums, &amp; HOA Pools/Spas Enclosures</i>		Plans	Pre-Plaster
<p>Completely encloses pool/spa</p> <p>Height ≥ 6 feet from the ground surface on the outside of the fence (NRH ordinance)</p> <p>No openings UNDER which a (4”) diameter sphere can pass</p> <p>(45”) or more between tops of horizontal members - No openings through which a (4”) diameter sphere can pass</p> <p>Less than (45”) between tops of horizontal members - No openings through which a (1.75”) diameter sphere can pass</p> <p>Chain link fencing prohibited</p> <p>Decorative designs or cutouts on/ in enclosure: <input type="checkbox"/> <b>NO</b> openings greater than (1.75”) in any direction</p> <p>No large indentations/protrusions in a solid wall on the side away from the pool</p> <p>No permanent equipment/ structures constructed/placed that makes them readily available for climbing over the enclosure.</p> <p>Self-closing, Self-latching device; able to be locked, opens outward away from the pool yard</p> <p>Latch (60”) off ground or higher, OR</p> <p>Latch LOWER than (60”) off ground IF:</p> <ul style="list-style-type: none"> <li>(1) Latch is on pool side</li> <li>(2) Latch is 3” or more below top of gate, <b>AND</b></li> <li>(3) No opening greater than 1/2” in any direction within 18” from the latch; OR</li> </ul> <p>Latch (42”) off ground or higher if the gate can <b>ONLY</b> be opened by a key, card, or combination on both sides of the gate.</p> <p>No doors or windows in enclosure that open to outside the pool enclosure (prohibited)</p>			
<i>Other Class C Pools/Spas (i.e. Hotel/Motel, etc.)</i>		Plans	Pre-Plaster
<p>Height ≥ 6 feet from the ground surface on the outside of the fence (NRH ordinance)</p> <p>Openings in or under enclosure do not allow passage of 4-in diameter sphere.</p> <p>No objects placed within 36 inches from outside of fence, tree limbs kept trimmed</p> <p>Chain link enclosures not allowed.</p> <p>Horizontal mid-rail not allowed, designed to be non-climbable.</p> <p>Distance between horizontal members shall be no less than 45 inches.</p> <p>Windows that open into enclosure not allowed unless they are ≥6 feet from ground surface</p>			

<b>ENCLOSURES (CONTINUED)—Other Class C Pools/Spas</b>	<b>Plans</b>	<b>Pre-Plaster</b>
Doors/gates of a building capable of being opened not allowed unless: (1) Doors/gates between building and enclosure are for entry into adjacent storage room, restroom, shower room, dressing room, or mechanical room; or (2) The room does not have any door or gate openings to the outside of the pool yard or spa yard enclosure; or (3) The pool or spa yard is indoor and complies with requirements for indoor enclosures on page 71 of State Pool Code.		
Gates/doors are self-closing and self-latching.		
Gates/doors open outward away from pool/spa.		
Gate/door opening hardware is hand-activated and ≥ 3.5 ft. high from deck. Hardware only permitted on pool/spa side of gate, no openings >0.5 inches within 18" of the hardware.		
Gates/doors are capable of being locked / secured.		
Enclosure must be locked for repairs/hazards/adding chemicals by hand/etc.		

<b>DRESSING/SANITARY FACILITIES</b>	<b>Sec. 265.204 pages 71-74</b>	<b>Plans</b>	<b>Preliminary</b>
Fixtures designed to be cleanable/installed according to plumbing codes/cleaned			
Adequate ventilation required to prevent objectionable odors			
Class A/B/C pools/spas constructed before 01-2021 comply with rules at time of construction			
Separate dressing/toilet facilities for each gender			
Well lit/drained/ventilated, planned/developed to maintain sanitation			
Partitions durable, protected from water damage, waterway provided to permit cleaning			
Adequate number hose bibs/hoses of adequate length provided for cleaning, stored properly			
Floors smooth/easy-to-clean/impervious-to-water/slip-resistant. Meet ANSI A137.1 reqs			
Lavatory/shower/toilet located to encourage use of facilities by pool/spa users			
Shower provided with hot/cold running water, anti-scald device			
Showerhead provides water flow of not less than 2 gallons/minute			
Heated shower water temperature between 90-120 degrees F			
Sanitary napkin receptacles provided at each toilet/shower areas for female use			
If dressing/sanitary facilities provided, they must have: (1) Metal/plastic soap dispensers at each lavatory; (2) Shatter resistant mirrors; (3) Toilet paper holders/toilet paper at each toilet; (4) Covered waste receptacles in toilet area or dressing room areas; (5) Single-use hand drying towels or hand drying devices provided near the lavatory.			
See 25 TAC 265.204(f), page 73 of State Pool Code, Minimum Number of Fixtures Required			
Apartments/hotels/motels/condos not required to have cleaning or rinsing showers, dressing rooms, toilets, urinals (unless the facility has toilets for pool/spa users), hand drying towels (unless the facility has a lavatory), baby changing table (unless a lavatory with faucet and soap provided), or a lavatory unless a faucet/soap provided & proper wastewater disposal.			

<b>FOOD, BEVERAGES, AND CONTAINERS</b>	<b>Sec. 265.205, page 76</b>	<b>Preliminary</b>	<b>Final</b>
Food/beverages not allowed in pool/spa unless it is privately owned.			
Glass containers prohibited.			
Covered trash receptacles required where food or beverages are allowed or served.			

<b>OTHER RELEVANT 2018 ISPSC Codes</b>
102.5 Historic Buildings
102.8 Code official has ability to determine requirements not covered by code (ability to impose additional requirements also included in NRH ordinance amendments)
304—Design/Construction of Pools/Spas in Flood Hazard Areas
307.1.1 Glazing in Hazardous Locations
307.1.3 Roofs/Canopies

<b>WATER QUALITY</b>	<b>Sec 265.206 pages 76-79</b>	<b>Discuss with Facility</b>
Water quality for pools/spas must meet criteria in 25 TAC 265.206(b) (pages 76-77)		
Cyanuric acid prohibited in indoor pools, spas, and in therapy pools		
Water clarity must pass Secchi disk test		
Facility must have reliable means available for testing pH, free/total chlorine, bromine, cyanuric acid (when used), alkalinity, and calcium hardness.		
Free available chlorine/bromine levels shall be determined using DPD method		
ORP readings recorded at same time as sanitizer/pH tests where in-line meters used		
Test kits/reagents stored properly/protected		
Reagents changed at frequency to ensure accuracy		
Water in the pool shall be chemically balanced using LSI/etc. every 10 days		
Class A/B pools/spas tested for disinfectant/pH levels every 2 hours, or once per day if using automatic monitoring system. Cyanuric acid levels measured once/week		
Class C pools/spas with on-site staff tested for disinfectant/pH levels 3 times/day, or once per day if using automatic monitoring system. Cyanuric acid levels measured once/week		
Class C pools/spas without on-site staff tested for disinfectant/pH levels 1 time/day, once per week if using remote automatic monitoring system. Cyanuric acid levels tested once/week.		
Alkalinity/calcium hardness/chemical balance measured every 30 days or for water clarity		
Water chemistry testing records maintained at least 2 years, available within 5 business days		
Cyanuric acid levels follow Model Aquatic Health Code requirements (NRH ordinance)		

<b>OPERATING GUIDELINES</b>	<b>Sec. 265.184 page 74-75 NRH Ordinance</b>	<b>Discuss with Facility</b>
All pools/spas under supervision of Certified Pool Operator or equivalent (see page 75)		
CPO or designated representative must respond to site within 1 hour of being notified of a problem by NRH Consumer Health (NRH Ordinance)		
CPO's name/contact info available to on-site staff and regulatory authority		
Pools/spas required to meet operational standard most applicable to their use		
Water clarity maintained, pool not open if suction outlets not clearly visible		
Water clarity maintained during off-season, nuisance conditions not allowed		
Domestic animals prohibited in enclosure, except service animals. No animals in pool/spa		
Pool/spa closed if actual water level of pool/spa is below design operating level range		
No person shall be prohibited from the use of a USCG-approved PFD in a pool/spa		
Personnel shall be properly trained and have appropriate PPE to handle chemicals		
Use of chemicals in pools/spas according to manufacturer directions, no chemical used in a way that violates manufacturer instructions for chemical feed system or NSF 50 certification		
Permit/inspections required from NRH Consumer Health to operate pool/spa(NRH ordinance)		
Certified Pool Operator must register certification with NRH Consumer Health		
Attendance at annual preseason safety class required (NRH ordinance)		
Annual electrical inspection by licensed electrician required		
Secured/locked/posted closed if unsafe/hazardous conditions exist (NRH ordinance)		

**PUBLIC INTERACTIVE WATER FEATURES (PIWFs)**

**25 TAC 265.301-308  
2018 ISPSC  
NRH Ordinance**

<i>GENERAL DESIGN AND CONSTRUCTION OF PIWFS</i>		25 TAC 265.301, 304-306 2018 ISPSC	Plans	Post-Construction
Certain rules not applicable to certain PIWFS—see 25 TAC 265.301				
Initial water supply shall be potable water				
RPZ backflow assembly/approved air gap required to prevent backflow				
Hose bibs protected by vacuum breaker backflow preventer				
Backwash water discharged as wastewater in accordance with TCEQ/local requirements				
Designed to accommodate 100% of turnover flow rate/maintain distribution of disinfectant through all parts of the PIWF/fountain				
Equipment/chemical feed system conforms with NSF/ANSI 50				
Designed for turnover rate at least once/hour				
Treatment tank designed to provide ready access for cleaning/inspections				
Treatment tank capable of being completely drained				
Treatment tank has automatic water level controller				
Makeup water to treatment tank introduced via air gap or RPZ backflow preventer				
Automatic disinfectant/pH feed equipment, provide continuous/effective disinfection at all times				
Chemical feed equipment capable of automatically adjusting chemical feed based on demand				
Designed to prevent siphoning from recirculation system to solution container and to prevent siphoning of chemical solution into the PIWF				
Failure-proof features incorporated so that chemical cannot feed into PIWF/piping/water supply if equipment/power fails/not adequate return flow to disperse chemical				
2018 ISPSC: If PIWF considered Class D-6 pool, must have depth ≤ 12 inches				
2018 ISPSC: If PIWF considered spray pool, must have depth ≤ 6 inches				
2018 ISPSC: See Chapter 6 of ISPSC for more information				
<i>SUPPLEMENTAL WATER TREATMENT SYSTEMS</i>		25 TAC 265.306	Plans	Post-Construction
Equipped with supplemental water treatment system to prevent <i>Cryptosporidium</i> infection				
UV light disinfection systems conform to NSF/ANSI-50 Standard				
UV light systems provide validated dosage to kill 3-log reduction of <i>Cryptosporidium</i>				
UV light systems provide validated dosage equivalent to ≥ 40mJ/cm <sup>2</sup> at end of lamp life				
UV light systems equipped with automatic mechanism for shutting off power to light source whenever protective cover is removed				
UV light systems installed to protect from electric shock/excessive radiation/UV light exposure				
Ozone disinfection systems meet standards in EPA guidance located here: <a href="https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockkey=2000229L.TXT">https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockkey=2000229L.TXT</a>				
Other products/processes to control <i>Cryptosporidium</i> conform to NSF/ANSI-50 Standard				
Facility can use weekly hyperchlorination in line with CDC guidelines/approved by department				
<i>SIGNAGE FOR PIWFS</i>		25 TAC 265.303(d-e)	Plans	Preplaster
Signage posted at PIWF entrance or clearly visible before contact with PIWF water occurs				
Signs securely mounted, visible, easily read				
Letters at least 2 inches height, contrasting color to background				
"NON-SERVICE ANIMALS PROHIBITED"				
"CHANGING DIAPERS WITHIN 6 FEET OF WATER FEATURE IS PROHIBITED"				
"USE OF THE WATER FEATURE IF ILL WITH CONTAGIOUS DISEASE IS PROHIBITED"				
"DO NOT DRINK WATER FROM THE WATER FEATURE"				
"USE OF THE WATER FEATURE WHEN ILL WITH DIARRHEA IS PROHIBITED"				
If no operator/owner on site:Contact Number for if malfunction/unsanitary condition/etc. occurs				
2018 ISPSC: Section 611 of 2018 ISPSC provides info on other signage that may be required				

<b>WATER QUALITY FOR PIWFS</b>	<b>25 TAC 265.306</b>	<b>Discuss with Facility</b>
Water quality testing device/kit conforms to NSF/ANSI-50 Standard		
Chemical testing reagents stored/replaced at frequencies recommended by manufacturer		
Acceptable pH level 7.0-7.8		
Acceptable free chlorine level 1-8 ppm (determined using DPD method or equivalent)		
Acceptable bromine level 2.5-12ppm (determined using DPD method of equivalent)		
Acceptable Combined Chlorine Outdoor Facilities ≤1.5ppm		
Acceptable Combined Chlorine Indoor Facilities ≤0.5ppm		
Stabilizer/Cyanuric acid prohibited indoor facilities		
Acceptable stabilizer/cyanuric acid levels for outdoor facilities: ≤50ppm		
All PIWFS must maintain sanitizer/pH/cyanuric acid at acceptable levels		
All PIWFS must implement a supplemental water treatment system		
With automatic feed equipment: minimum testing once/day for disinfectant/pH		
Without automatic feed equipment, minimum testing twice/day for disinfectant/pH		
Testing for cyanuric acid required (when in use) at least once every 7 days during operation		
Stand-alone PIWFS constructed before May 1, 2010 test water for <i>Cryptosporidium</i> every 14 days during operation		
PIWFS constructed after May 1, 2010 that share a water supply/systems that allow water to co-mingle with a pool test water of PIWF for <i>Cryptosporidium</i> every 30 days during operation		
Bacterial samples shall not exceed 200 bacteria/mL by HPC or indicate presence of Total Coliforms in a 100mL sample by multiple tube/membrane filter/Minimal Medium ONPG-MUG		
When water tests positive for <i>Cryptosporidium</i> , operator shall notify NRH Consumer Health immediately, shut off water to all features of PIWF, and immediately close PIWF to public		
PIWF shall not reopen when <i>Cryptosporidium</i> detected until PIWF is hyperchlorinated following CDC guidelines and documentation completed verifying proper hyperchlorination		
<b>OPERATING GUIDELINES</b>	<b>25 TAC 265.303</b>	<b>Discuss with Facility</b>
Under supervision of Certified Pool Operator or equivalent (265.303a-b)		
CPO or designated representative must respond to site within 1 hour of being notified of a problem by NRH Consumer Health (NRH Ordinance)		
Tank completely drained/cleaned to maintain water quality/sanitary conditions		
For zero-depth PIWF: Dirt/trash/debris/etc. removed, surface sanitized		
Records for operation/maintenance/etc. available, kept for minimum 2 years		
Constructed prior to May 1, 2010: Turnover rate meets minimum design turnover rate		
Constructed/remodeled after May 1, 2010: Turnover rate at least once/hour		
Use of chemicals in pools/spas according to manufacturer directions, no chemical used in a way that violates manufacturer instructions for chemical feed system or NSF 50 certification		
Permit/inspections required from NRH Consumer Health to operate pool/spa(NRH ordinance)		
Certified Pool Operator must register certification with NRH Consumer Health(NRH ordinance)		
Attendance at annual preseason safety class required (NRH ordinance)		
Annual electrical inspection by licensed electrician required (NRH ordinance)		
Secured/locked/posted closed if unsafe/hazardous conditions exist (NRH ordinance)		