

**CITY OF EL PASO, TEXAS**  
**DEPARTMENT HEAD'S SUMMARY REQUEST FOR COUNCIL ACTION (RCA)**

DEPARTMENT: DEVELOPMENT SERVICES

AGENDA DATE: INTRODUCTION: AUGUST 12, 2008  
PUBLIC HEARING: AUGUST 19, 2008

CONTACT PERSON/PHONE: LARRY F. NICHOLS, DEVELOPMENT SERVICES (915) 541-4557

DISTRICT(S) AFFECTED: ALL

**SUBJECT:**

An Ordinance amending Title 18 (Building And Construction), Chapter 18.10 (Residential Code) Section 18.10.310 (Appendix G, Swimming Pools, Spas And Hot Tubs) of the El Paso City Code to establish standards for Swimming Pools, Spas And Hot Tubs by adding barrier requirements for Residential Swimming Pools, Spas And Hot Tubs and entrapment protection for Residential Swimming Pool and Spa Suction Outlets; providing for a one year period to bring certain existing Swimming Pools, Spas and Hot Tubs into compliance; with penalties not to exceed Two-Thousand Dollars (\$2,000.00) per day per violation as provided in Section 18.02.107 of the El Paso City Code.

**BACKGROUND / DISCUSSION:**

Discussion and direction from the Health & Public Safety Legislative Review Committee on July 30, 2008.

Discussion and direction from City Council on July 8, 2008.

**PRIOR COUNCIL ACTION:**

Public Hearing: April 1, 2008, April 22, 2008, and July 8, 2008

**AMOUNT AND SOURCE OF FUNDING:**

N/A

**BOARD / COMMISSION ACTION:**

Legislative Review Committee: January 30, 2008, May 1, 2008, June 25, 2008, & July 30, 2008  
Workshops: May 7, 2008 & July 28, 2008

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\*\*\*\*\*REQUIRED AUTHORIZATION\*\*\*\*\*

**LEGAL:** (if required) \_\_\_\_\_ **FINANCE:** (if required) \_\_\_\_\_

**DEPARTMENT HEAD:** *Victor Q. Torres*  
**VICTOR Q. TORRES, DEVELOPMENT SERVICES DIRECTOR**

**OTHER:** \_\_\_\_\_  
(Example: if RCA is initiated by Purchasing, client department should sign also)  
**Information copy to appropriate Deputy City Manager**

**APPROVED FOR AGENDA:**

**CITY MANAGER:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

ORDINANCE NO.: \_\_\_\_\_

AN ORDINANCE AMENDING TITLE 18 (BUILDING AND CONSTRUCTION), CHAPTER 18.10 (RESIDENTIAL CODE) SECTION 18.10.310 (APPENDIX G, SWIMMING POOLS, SPAS AND HOT TUBS) OF THE EL PASO CITY CODE TO ESTABLISH STANDARDS FOR SWIMMING POOLS, SPAS AND HOT TUBS BY ADDING BARRIER REQUIREMENTS FOR RESIDENTIAL SWIMMING POOLS, SPAS AND HOT TUBS AND ENTRAPMENT PROTECTION FOR RESIDENTIAL SWIMMING POOL AND SPA SUCTION OUTLETS; PROVIDING FOR A ONE YEAR PERIOD TO BRING CERTAIN EXISTING SWIMMING POOLS, SPAS AND HOT TUBS INTO COMPLIANCE; WITH PENALTIES NOT TO EXCEED TWO-THOUSAND DOLLARS (\$2,000.00) PER DAY PER VIOLATION AS PROVIDED IN SECTION 18.02.107 OF THE EL PASO CITY CODE.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF EL PASO:

**WHEREAS**, present barrier and entrapment prevention measures exist concerning residential swimming pools, spas and hot tubs to prevent drowning deaths and serious injuries; and

**WHEREAS**, drowning and serious injury in residential swimming pools, spas and hot tubs continue to occur; and

**WHEREAS**, additional requirements governing barriers and entrapment protection are needed for residential swimming pools, spas and hot tubs to provide protection against accidental drowning or serious injury resulting from improper swimming pool, spa or hot tub access; and

**WHEREAS**, the City Council finds that allowing a one-year period for property owners to bring certain existing swimming pools spas and hot tubs into compliance allows property owners to fully amortize the costs associated with the construction of the barriers required by the City Code at the time of the construction.

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**Section 1.** That Section 18.10.310 of the El Paso City Code, Appendix G - Swimming Pools, Spas and Hot Tubs of the International Residential Code 2003 is Amended as follows:

**18.10.310 Appendix G 2003 – Adopted – Swimming pools, spas and hot tubs.**

The “International Residential Code for One – and Two-Family Dwellings,” Appendix G – Swimming Pools, Spas and Hot Tubs (hereafter “Appendix G 2003”), is adopted in its entirety. Existing swimming pools, spas and hot tubs shall comply with Appendix G 2003 or the International Residential Code in effect at the most recent time a building permit was issued to install, build, alter, change or replace the swimming pool, except that on September 1, 2009 the requirements in Appendix G 2008, Section 105, Barrier Options, shall be met as provided in Section 18.10.310.105.6.

**18.10.310.1** Appendix G 2008 – Adopted and Amended - Swimming Pools, Spas and Hot Tubs. Sections 18.10.310.101 through 18.10.310.108 (hereafter “Appendix G 2008”) shall apply to all swimming pools spas and hot tubs built and/or installed for which a building permit was issued on or after September 1, 2008. All additions, alterations, or replacements made to existing swimming pools, spas and hot tubs for which a building permit was issued on or after September 1, 2008 shall be subject to Appendix G 2008, Section 18.10.310.105 (AG 105) Barrier Requirements, as provided in Section 18.10.310.105.6.

**18.10.310.101 SECTION AG101**

**AG101.1 General.** The provisions of this appendix shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one- and two-family dwelling.

**18.10.310.102 SECTION AG102 DEFINITIONS**

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**AG102.1 General.** For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2, International Residential Code Definitions.

**ABOVE-GROUND/ON-GROUND POOL.** See "Swimming pool."

**BARRIER.** A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

**EXISTING SWIMMING POOL.** A Swimming pool that was installed and/or constructed pursuant to a building permit issued prior to September 1, 2008.

**HOT TUB.** See "Swimming pool."

**IN-GROUND POOL.** See "Swimming pool."

**RESIDENTIAL.** That which is situated on the premises of a detached one- or two-family dwelling or a one-family townhouse not more than three stories in height.

**SPA, NONPORTABLE.** See "Swimming pool."

**SPA, PORTABLE.** A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating equipment are an integral part of the product.

**SWIMMING POOL.** Any structure intended for swimming or recreational bathing that contains water over 24 inches (610mm) deep. This includes in-ground, aboveground and on-ground swimming pools, hot tubs, spas, and fixed in place wading pools.

**SWIMMING POOL, INDOOR.** A swimming pool that is totally contained within a structure and surrounded on all four sides by walls of said structure.

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**SWIMMING POOL, OUTDOOR.** Any swimming pool that is not an indoor pool.

**18.10.310.103 SECTION AG103 SWIMMING POOLS**

**AG103.1 In-ground pools.** In-ground pools shall be designed and constructed in conformance with ANSI/NSPI-5 as listed in Section 18.10.310.108 (AG108).

**AG103.2 Above-ground and on-ground pools.** Above-ground and on-ground pools shall be designed and constructed in conformance with ANSI/NSPI-4 as listed in Section 18.10.310.108 (AG 108).

**18.10.310.104 SECTION AG104 SPAS AND HOT TUBS**

**AG104.1 Permanently installed spas and hot tubs.** Permanently installed spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-3 as listed in Section 18.10.310.108 (AG108).

**AG104.2 Portable spas and hot tubs.** Portable spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-6 as listed in Section 18.10.310.108 (AG108).

**18.10.310.105 SECTION AG105 BARRIER REQUIREMENTS**

**AG105.1 Application.** The provisions of this chapter shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drowning and near-drowning by restricting access to swimming pools, spas and hot tubs.

1. The appropriate City departments shall have available on the City's web site City approved swimming pool safety information available for consumers to down load. The City shall provide public service announcements on pool safety and pool safety information to pool contractors, realtors, and retailers that sell swimming pools and pool supplies. The City shall provide pool

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safety information at the time of final inspection of pools for which a building permit was issued.

**AG105.2 Outdoor swimming pools.** It is the responsibility of the property owner and any other person in responsible charge of a swimming pool to ensure that the required swimming pool barrier, including all gates, doors, locks, latches and other portions of the barrier are maintained safe and in good working order at all times. No person shall alter or remove any portion of a swimming pool barrier except to repair, reconstruct or replace the barrier in compliance with the provisions of this section. All barriers shall be installed, inspected, and approved prior to plastering and filling with water or as otherwise provided in this Code. An outdoor swimming pool, including an in-ground, aboveground or on-ground pool, hot tub or spa shall be provided with a barrier that shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an aboveground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).
2. Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.
3. Solid barriers that do not have openings, such as masonry or stonewall shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is

less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1.75 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.

5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.
6. **Maximum mesh size** for chain link fences shall be a 1.5 inch (37 mm) square. The mesh shall not be less than 11 gage.
7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1.75 inches (44 mm).
8. **Access gates** shall comply with the requirements of Section AG105.2, Items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates need not be self-closing or self-latching and shall be equipped with a padlock or similar locking device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:

- 8.1 The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate, and

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8.2 The gate and barrier shall have no opening greater than 0.5 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism

9. **Barrier Options**

Where a wall of a dwelling serves as part of the barrier, conditions 9.1 or 9.2 shall be met:

9.1 **Alarms** Doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and/or its screen, if present, are opened. The audible alarm shall be listed in accordance with UL 2017. The audible alarm shall activate within 7 seconds and sound continuously for a minimum of 30 seconds immediately after the door and/or its screen, if present, are opened and be capable of being heard throughout the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as a touch pad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last for not more than 15 seconds. The deactivation switch(es) shall be located at least 54 inches (1372 mm) above the threshold of the door; or

9.2 **Self Closing Doors/Latches** Other means of protection, such as self-closing doors with self-latching devices, per ANSI K81071 F (2003), shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by Item 9.1, 9.3 or 9.4, or

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Alternatives to using the wall of the dwelling include the following items 9.3 and 9.4.

**9.3 Pool Cover** The pool shall be equipped with a key operated powered safety cover in compliance with ASTM F1346. The keyed pool cover switch shall be located not less than 54 inches (1372 mm) above the floor or adjacent ground level and where the entire pool cover can be visually inspected; or

**9.4. Isolation barriers** Isolation barriers consist of fencing completely surrounding the outdoor swimming pool or outdoor spa where the wall of the dwelling or any other structure does not serve as part of the isolation barrier. Isolation barriers must meet all of the requirements of Section 18.10.310.105 AG 105.2 sub paragraphs 1 through 8 and 11 but shall not be allowed to utilize the barrier methods described in sub paragraphs 9.1 and 9.2. Where isolation barriers are used, no additional fencing shall be required and the provisions of 18.10.310.105.2.9.1 through 9.3 shall not be required.

10. Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps:

10.1 The ladder or steps shall be capable of being secured, locked or removed to prevent access; or

10.2 The ladder or steps shall be surrounded by a barrier which meets the requirements of Section AG105.2, Items 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall

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not allow the passage of a 4-inch-diameter (102 mm) sphere.

11. **Natural Barriers** Where there are natural barriers between properties, such as lakes and solid rock vertical cliffs not less than 10 feet (3048 mm) in height and a slope of not less than 1 horizontal to 10 vertical, fence barriers shall not be required between properties where the natural barriers exist. To ensure proper natural barriers are maintained, barrier fences shall project a minimum of 24 inches (610 mm) into lakes to where there is at least 24 inches (610 mm) depth from the lake surface to the top of the submerged horizontal member or the lake bottom when there is no submerged horizontal member. There shall be no horizontal member less than 45 inches (1143 mm) above the lake surface. Where the solid rock cliff extends above the property, the intersection barriers with the solid rock cliff shall not allow passage of a 4-inch diameter (102 mm) sphere.

**AG105.3 Indoor swimming pool.** Walls surrounding an indoor swimming pool shall comply with Section AG105.2, Item 9.

**AG105.4 Prohibited locations.** Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

**AG105.5 Barrier exceptions.** Spas and hot tubs with a safety cover that complies with ASTM F 1346, as listed in section 18.10.310.108 (AG 108), shall be exempt from the provisions of Appendix G 2008.

**AG105.6 Barriers required** Existing swimming pools, spas and hot tubs for which a building permit was issued prior to September 1, 2008, shall comply with Appendix G 2003, or the International Residential Code in effect at the most recent time a building permit was issued to build, install, alter, change or replace the swimming pool, except that on September 1, 2009 and thereafter the

requirements in Appendix G 2008, Section 105, Barrier Options, shall be met whenever:

- 6.1 There is a sale of a residence that has a swimming pool at the time of the sale.
- 6.2 There is a change of use or character to the primary building occupancy on the property.
- 6.3 A new swimming pool, spa and/or hot tub is installed for which a building permit is required, or changes, alterations, or replacements are made to an existing swimming pool, spa or hot tub for which a building permit is required.

**18.10.310.106 SECTION AG106 ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS**

**AG106.1 General.** Suction outlets shall be designed to produce circulation throughout the pool or spa. Single-outlet systems, such as automatic vacuum cleaner systems, or multiple suction outlets, whether isolate by valves or otherwise shall be protected against user entrapment; and

**AG106.2 Suction fittings.** Pool and spa suction outlets shall have a cover that conforms to ANSI/ASME A112.19.8M, or an 18 inch x 23 inch (457 mm by 584 mm) drain grate or larger, or an approved channel drain systems.

**Exception:** Surface skimmers; and

**Either AG 106.3 or AG 106.4 shall apply:**

**AG106.3 Single-outlet Systems: Atmospheric vacuum relief system required.** Pool and spa single-or multiple-outlet circulation systems shall be equipped with atmospheric vacuum relief should grate covers located therein

become non-functional. This vacuum relief system shall include at least one approved or engineered method of the type specified herein, as follows:

1. Safety vacuum release system conforming to ASME A112.19.17 or
2. An approved gravity drainage system; or

**AG 106.4 Multiple Suction Outlets: Dual drain separation.** Single or multiple pump circulation systems have a minimum of two suction outlets of the approved type. A minimum horizontal or vertical distance of 3 feet (914 mm) shall separate the outlets. These suction outlets shall be piped so that water is drawn through them simultaneously through a vacuum-relief protected line to the pump or pumps; and

**AG106.5 Pool cleaner fittings.** Where provided, vacuum or pressure cleaner fitting(s) shall be located in an accessible position(s) at least 6 inches (152 mm) and not more than 12 inches (305 mm) below the minimum operational water level or as an attachment to the skimmer(s).

### 18.10.310.107 Section AG 107 ABBREVIATIONS

#### AG107.1 General.

ANSI—American National Standards Institute, 11 West 42<sup>nd</sup> Street, New York, NY 10036

ASME – American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10015-5990

ASTM—ASTM International,

100 Barr Harbor Drive, West Conshohocken, PA 19428

NSPI—National Spa and Pool Institute, 2111 Eisenhower Avenue, Alexandria, VA 22314

UL – Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, Illinois 60062-2096

**18.10.310.108 Section AG 108 STANDARDS**

**AG108.1 General.**

**ANSI/NSPI:** ANSI/NSPI-3-99 Standard for Permanently Installed Residential Spas AG104.1

**ANSI/NSPI-4-99 Standard for Above-ground/On-ground Residential Swimming Pools AG103.2**

**ANSI/NSPI-5-99 Standard for Residential In-ground Swimming Pools AG103.1**

**ANSI K81071 F (2003) Standards for Self-Closing Spring Hinges AG 105.2.9.2**

**ANSI/NSPI-6-99 Standard for Residential Portable Spas AG104.2**

**ANSI/NSPI-5-2003 Standard for Residential In-ground Swimming Pools. AG103.1**

**ANSI/ASME A112.19.8M-1987 (R1996) Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, Hot Tubs and Whirlpool Bathing Appliances AG106.2**

**ASTM - ASTM F 1346-91 (2003) Performance Specification for Safety Covers and Labeling Requirements for all Covers for Swimming Pools, Spas and Hot Tubs AG105.2, AG105.5**

**ASME- ASME A112.19.17 Manufacturers Safety Vacuum Release Systems (SVRS) for Residential and Commercial Swimming Pool, Spa, Hot Tub and Wading Pool AG106.3**

**Section 2.** Except as herein amended, Title 18 of the El Paso City Code shall remain in full force and effect.

**ADOPTED THIS \_\_\_\_\_ day of \_\_\_\_\_ 2008.**

**CITY OF EL PASO**

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**John F. Cook, Mayor**

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**ATTEST:**

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**Richarda Duffy Momsen**  
**City Clerk**

**APPROVED AS TO FORM:**

  

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**Mark Shoemith**  
**Assistant City Attorney**

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