

# Town of Lovettsville

## PUBLIC HEARING STAFF REPORT

**TO:** Planning Commission

**FROM:** Stephen E. McGregor, Zoning Administrator

**DATE:** June 2, 2010

**SUBJECT: LVZA 2010-0003 Outdoor Swimming Pools –**  
Zoning Ordinance Amendment

**PURPOSE:** To provide an evaluation of and recommendations upon which the Planning Commission may make a recommendation for amending the swimming pool regulations in Section 4-8 of the Zoning Ordinance and request authorization for public hearing of a draft Ordinance Amendment to modify the existing regulations.

**BACKGROUND:** On February 11, 2010 the Town Council directed staff and the Zoning Administrator to develop an evaluation of the private outdoor swimming pool regulations because it is not practical to enforce all of the current regulations. The Council voiced interest in simplifying the regulations so that they only address the visual impact of swimming pools on adjacent properties. An ordinance amendment would remove those provisions that currently require the Town to undertake electrical inspections and enforce safety aspects. These particular regulations are already controlled through the County building permit process, which is required by the County for swimming pools in the Town as well as the County. The Council wants to modify the Town regulations so they are similar to County regulations for swimming pools and do not duplicate the County regulations. On May 5 the Planning Commission discussed the issues raised by staff regarding changes in the outdoor residential swimming pool regulations and discussed in general terms the staff's recommendation for amending the current Zoning Ordinance regulations. The Commission authorized a public hearing for this item, June 2, 2010.

### **DISCUSSION:**

The current Zoning Ordinance regulations for private outdoor swimming pools are in Article 4 General Regulations, Section 4-8 PRIVATE OUTDOOR SWIMMING POOLS, and read as follows:

"A location permit shall be granted for the installation or construction of a private outdoor swimming pool on the same lot as the principal residence, subject to the following

May 26, 2010

conditions:

- (a) Such pool may be erected on the required rear yard but not in the required side or front yard.
- (b) The edge of such pool shall not be located nearer than ten (10) feet to any lot line.
- (c) Any pool with a surface of one hundred fifty (150) square feet or more or a depth in excess of two (2) feet shall be completely surrounded by a fence or wall six (6) feet in height designed to prevent access thereto by small children and animals.
- (d) All gates or doors opening through said fence shall be erected, maintained and provided with a self-closing, self-latching gate to prevent unauthorized use of the pool.
- (e) All electrical wiring used in conjunction with such pool shall be installed below the ground or in a conduit to the nearest point of use. All wiring shall be waterproof. All connections shall be waterproof. All electric motors, lights, pumps, and like items shall be properly grounded."

The following issues pertain to streamlining the regulations for outdoor residential swimming pool:

1. The subject heading for swimming pools in the Zoning Ordinance could more precisely fit the type and location of swimming pools that should be regulated. Regulating only private swimming pools excludes swimming pools in commercial and light industrial districts and those owned by public agencies, such as the Loudoun County Parks, Recreation and Community Services agency that owns and operates the Lovettsville Community Center and its pool.
1. The introductory paragraph of Section 4-8 of the Zoning Ordinance should identify what type of pool would be subject to regulation. One option would be to do this as Loudoun County does. The County building permit process required for outdoor swimming pools only regulates those pools where the water depth is two feet or more without regard to area of the water surface. The Town regulation does not regulate a swimming pool if it has a surface area of less than 150 square feet. It can be argued that it is the depth of a swimming pool, not its surface area that presents a potential safety risk. The Town and County regulations do not coincide in this respect.
2. The Town Zoning Ordinance does not indicate if temporary pools or in-ground or above ground outdoor swimming pools are regulated. Some homeowners have permanent pools and some have inflatable pools that are deflated part of the year. Regulations for outdoor in-ground, above ground, permanent and temporary pools all can have a visual impact on adjoining residential properties. The Town Zoning Ordinance regulations could be improved by making it clear that all types of residential and non-residential swimming pools are regulated.
3. Loudoun County requires a building permit for all swimming pools with a water depth of two feet or more. The County permit requires a variety of safety

features, including fencing and certain access, gating and alarm requirements. These specifications are contained in the current edition of the Virginia Uniform Statewide Building Code as set forth in Title 36 of the Code of Virginia, which is based upon the International Residential Building Code guidelines and specifications to regulate swimming pool safety, shown in Appendix G of the IRC. If some pool, fence, gate or door alarm features related to swimming pools are served by electricity, these elements have to be inspected, for example. The current Town regulations are such that fencing, electrical wiring, lights, pumps, door alarms and self-latching gates have to be inspected. The Town is not in a position to undertake such inspections. The County is responsible for this type of inspection and currently have this responsibility in the Town. The Town regulations could make this shared responsibility clear.

4. The current Town regulations do not make it clear that swimming pools need a permit. If the Zoning Ordinance were to include such a statement this would help the public understand that there is a permit requirement.

At the May 5, 2010 Planning Commission meeting the Commission asked to see the regulations that Loudoun County uses for a swimming pool building permit. This is attached with a Fence Letter form that the County requires an applicant to fill out and sign as part of the building permit approval process. These documents could also be attached to the Town permit application so an applicant would know what the combined Town/County approval process is.

**CONCLUSION:** The Zoning Ordinance regulations for private outdoor swimming pools should be amended so that swimming pools in all districts and in both private and public ownership are under regulation whether they are permanent, temporary, in-ground or above-ground. The Town Zoning Ordinance should also be amended to reflect the fact that both the Town and the County share responsibility for regulating outdoor swimming pools. Under an amended set of regulations the Town would control the visual impact of outdoor swimming pools on neighboring residential property by regulating the yard and setback limits. Fencing, which is both a visual control and a safety measure, would be the responsibility of both the County and the Town.

In addition to amending the Zoning Ordinance regulations for swimming pools, the Town should create an application process that includes attaching a copy of Appendix G of the International Residential Building Code for Swimming Pools, Spas and Hot Tubs; Section 3109 of the International Building Code for non-commercial outdoor swimming pools; and the Fence Letter form required by the County to the Town application so an applicant knows when they obtain an application for that a County building permit is required and what needs to be provided for such a permit. It should be noted that the

Town does not intend to regulate spas and hot tubs even though the County requires building permits for these.

**RECOMMENDATION:** That the Planning Commission recommends approval of the following:

(A) Zoning Ordinance text amendment:

"4-8 PRIVATE OUTDOOR SWIMMING POOLS

A zoning permit shall be granted for the installation or construction of a temporary or permanent ~~private~~ outdoor swimming pool with a water depth of two (2) feet or more in any zoning district, subject to the following conditions:

- (a) In residential districts and the residential portions of other districts an outdoor swimming pool shall only be located in a rear yard ~~but not in the required side or front yard~~. A swimming pool is permitted in a front yard on a through lot only if it is located in the front yard opposite the front entrance of the building on the lot.
- (b) A outdoor swimming pool in a residential district or in the residential portion of other districts shall ~~not be~~ set back at least ~~located nearer than~~ ten (10) feet ~~to~~ from any lot line.
- (c) In commercial districts and the light industrial district a swimming pool is permitted to be located in a front, side and rear yard only if they are set back at least 50 feet from an adjacent residential district or from the residential section of the Town Center Planned Development T-C or Retirement Community R-C districts.
- (d) A property owner or tenant who is granted an approval by the Town for an outdoor swimming pool must provide the Town a copy of the Loudoun County building permit for said swimming pool prior to grading or installation.
- ~~(c) Any pool with a surface of one hundred fifty (150) square feet or more or a depth in excess of two (2) feet shall be completely surrounded by a fence or wall six (6) feet in height designed to prevent access thereto by small children and animals.~~
- ~~(d) All gates or doors opening through said fence shall be erected, maintained and provided with a self-closing, self-latching gate to prevent unauthorized use of the pool.~~
- ~~(e) All electrical wiring used in conjunction with such pool shall be installed below the ground or in a conduit to the nearest point of use. All wiring shall be waterproof. All connections shall be waterproof. All electric motors, lights, pumps, and like items shall be properly grounded."~~

(B) Establish a new application process for obtaining approval for an outdoor swimming pool [This would *not* amend the Zoning Ordinance] :

The Town should endorse an application process for permanent and temporary outdoor swimming pools wherein there is a separate swimming pool application that has three attachments: 1) the Fence Letter form (does not have to be filled out) required in the Loudoun County building permit process for these swimming pools; 2) Appendix G of the International Residential Building Code for Swimming Pools, Spas and Hot Tubs; and Section 3109 of the International Building Code for swimming pools that is used by Loudoun County to regulate outdoor swimming pools. The Town swimming pool application form should state that Spas and Hot Tubs are not regulated in the Town Ordinance even though Loudoun County requires a building permit.

**DRAFT MOTION:** “I move that the Planning Commission recommend approval of the recommendations to amend Section 4-8 of the Zoning Ordinance and establish a new application procedure, as presented in item LVZA 2010-0003 Outdoor Swimming Pools.”

**ATTACHMENTS:**

- 1) Appendix G of the International Residential Code, Swimming Pools, Spas and Hot Tubs, 2006.
- 2) Section 3109 of the International Building Code for swimming pools, 2006.
- 3) The Loudoun County Fence Letter form that is required as part of the County building permit process for outdoor swimming pools.

## APPENDIX G

# SWIMMING POOLS, SPAS AND HOT TUBS

### SECTION AG101 GENERAL

**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.

### SECTION AG102 DEFINITIONS

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

**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.

**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 (610 mm) deep. This includes in-ground, aboveground and on-ground swimming pools, hot tubs and spas.

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

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

### 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 AG107.

**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 AG107.

### 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 AG107.

**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 AG107.

### 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 drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.

**AG105.2 Outdoor swimming pool.** An outdoor swimming pool, including an in-ground, aboveground or on-ground pool, hot tub or spa shall be provided with a barrier which 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 which 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 which do not have openings, such as a masonry or stone wall, 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 (102 mm). 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 2.25-inch (57 mm) square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1.75 inches (44 mm).
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 shall have a self-latching 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
  - 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. Where a wall of a dwelling serves as part of the barrier one of the following conditions shall be met:
  - 9.1. The pool shall be equipped with a powered safety cover in compliance with ASTM F1346; or
  - 9.2. All 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 its screen, if present, are opened. The alarm shall sound continuously for a minimum of 30 seconds immediately after the door is opened and be capable of being heard throughout the house during normal house-hold activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as touchpad 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
  - 9.3. Other means of protection, such as self-closing doors with self-latching devices, which are ap-

proved by the governing body, shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described above.

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

**AG105.3 Indoor swimming pool.** All 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 or hot tubs with a safety cover which complies with ASTM F 1346, as listed in Section AG107, shall be exempt from the provisions of this appendix.

## 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 other such multiple suction outlets whether isolated by valves or otherwise shall be protected against user entrapment.

**AG106.2 Suction fittings.** All Pool and Spa suction outlets shall be provided with a cover that conforms with ANSI/ASME A112.19.8M, or a 12" × 12" drain grate or larger, or an approved channel drain system.

**Exception:** Surface skimmers

**AG106.3 Atmospheric vacuum relief system required.** All pool and spa single or multiple outlet circulation systems shall be equipped with atmospheric vacuum relief should grate covers located therein become missing or broken. Such vacuum relief systems 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

**AG106.4 Dual drain separation.** Single or multiple pump circulation systems shall be provided with a minimum of two (2) suction outlets of the approved type. A minimum horizontal or vertical distance of three (3) feet shall separate such 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.

**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 and not greater than twelve (12) inches below the minimum operational water level or as an attachment to the skimmer(s).

**SECTION AG107  
ABBREVIATIONS**

**AG107.1 General.**

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

ASTM—American Society for Testing and Materials  
1916 Race Street, Philadelphia, PA 19103

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

**SECTION AG108  
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/NSPI-6-99 Standard for Residential Portable Spas ..... AG104.2

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

**ASTM**

ASTM F 1346-91 (1996) 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

Attachment II was not available when packets were distributed (5/28/10).



## Loudoun County, Virginia

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### Department of Building and Development

1 Harrison Street, S.E., PO. Box 7000, Leesburg, VA 20177-7000

Administration: 703-777-0397 Metro: 478-8432 Fax: 7031771-5215

Inspections Information Only: 7031777-0220 Metro: 478-8414 Fax: 7031771-5522

### LOUDOUN COUNTY FENCE LETTER

Date: \_\_\_\_\_

We/I \_\_\_\_\_ hereby state that, prior to filling my swimming pool with water, we/I will build a fence that will meet the requirements for the Current Edition of the Virginia Uniform Statewide Building Code as set forth in Title 36 of the Code of Virginia (available at the Loudoun County Department of Building and Development upon request).

Owner's Signature: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_

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STATE OF VIRGINIA  
COUNTY OF LOUDOUN

I, the undersigned Notary Public, in and for the jurisdiction aforesaid, do hereby certify that \_\_\_\_\_ whose name(s) is/are signed to the foregoing Loudoun County Fence Letter, appeared before me and personally acknowledged the same in my jurisdiction aforesaid.

Given under my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 200 \_\_\_\_.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Notary Public