

City Council Workshop – October 10, 2017

Swimming Pool Fence/Barrier Requirements

An inquiry has been made regarding the allowance of pool covers in lieu of the required fencing around a swimming pool.

Current Requirement

The City of Lake Elmo's current ordinance requires the following:

Fences. All swimming pools shall be completely enclosed by a non-climbable type fence. All fence openings or points of entry into the pool area shall be equipped with gates. The fence and gates shall be at least 4 feet in height and shall be constructed of a minimum number 11 gauge woven wire mesh corrosion-resistant material or other material approved by the Building Official. All gates shall be equipped with self-closing and self-latching devices placed at the top of the gate or otherwise be inaccessible to small children. All fence posts shall be decay or corrosion resistant and shall be set in concrete bases or other suitable protection. The openings between the bottom of the fence and the ground or other surface shall not be more than 4 inches.

Research

The overwhelming majority of cities in Minnesota require fences around swimming pools. That said: there are several jurisdictions who have ordinances in place allowing powered safety covers in lieu of the required fence.

Rochester, Medina, Minnetrista, Independence, and Hampton Township all allow covers instead of fences.

Rochester City Code:

The City of Rochester Zoning Ordinance and Land Development Manual requires that property owners meet some basic safety requirements when locating a swimming pool on their lot. The standards are established in Section 62.278(5) of the ordinance.

(1) For an in-ground or surface swimming pool, the pool or the property upon which said pool is located shall be enclosed by a fence of a type which effectively controls the entrance by children to the pool area. The fence must be at least five feet in height. Wooden fences with boards placed vertically shall not have any opening wider than four inches per opening and wooden fences with boards placed horizontally shall not have any opening wider than one inch per opening. **For an in-ground pool, a mechanically controlled cover can be used in lieu of fencing requirements.**

(2) Gates installed for access to the property or pool area shall be equipped with an automatic closing and latching device to protect against uncontrolled access to the property.

Rochester City Code: (Continued)

(3) For an above ground swimming pool, the pool shall be equipped with an automatically retractable type ladder, a retractable ladder, a removable ladder or shall be fenced in accordance with Section 62.278, subd. 5 (B)(1). The ladder must be removed or retracted when the pool is not being attended.

(4) If access to the pool is via a deck or porch, then no access from the ground is permitted to the deck area unless the property or the ground access to the deck is fenced in accordance with Section 62.278, subd. 5 (B)(1).

(5) It shall be the responsibility of the property owner where said pool is located to maintain all pool covers, fences, gates and closure devices in good operating condition.

(6) Failure to maintain pool covers, fences, failure to have gates closed or failure to remove or retract the ladder access to the pool shall constitute a violation of the Zoning Ordinance and is subject to the penalties provided therefore.

Medina City Code:

Section 800.11. Safety Fence or Automatic Pool Cover Required.

Subd. 1. A safety fence meeting the following standards shall be required around all pools:

(a) Except as provided for in subd. 1(d), a safety fence at least 4 feet in height shall completely enclose the pool. All openings or points of entry into the pool area shall be equipped with self-closing gates or doors. All gates and doors shall have a self-latching latch which is no less than 4 feet above the ground level and which shall be constructed and placed so as to be inaccessible to small children. All gates and doors shall be locked when the pool is not in use or is unattended by an adult with demonstrated swimming ability. Any opening between the bottom of the fence and the ground level shall not exceed 3 inches.

(b) Safety fences shall be constructed so as to inhibit the climbing thereof by any person. If constructed primarily of wood, the fence shall be composed of vertical members with spaces no greater than 4 inches between the boards. If constructed primarily of other materials, the fence shall contain no spaces through which a sphere 4 inches or more in diameter may pass.

(c) No wall of any pool constructed above ground level, regardless of the height thereof, shall qualify as a safety fence.

(d) If the house or other structure provides all or a portion of one side of the pool enclosure, all doors from the house or structure providing access to the pool area shall be equipped with a pool alarm meeting the standards of F2208-02 of the American Society of Testing and Materials (ASTM), as such standards may be modified, superseded or replaced by ASTM.

Subd. 2. As an alternative to a safety fence, an automatic pool cover may be utilized if it meets the standards of F1346-91 (Reapproved 1996) of ASTM, as such standards may be modified, superseded or replaced by ASTM.

Maplewood:

The City of Maplewood has language in ordinance that provides a path to request an ‘alternate’ to the fence requirement.

The City of Maplewood’s ordinance simply provides that “[a]lternatives to the fence requirement, such as a proposal to use a pool cover or some other means of swimming-pool protection, shall be considered an exception request and shall be subject to review and approval by the city council.

Recognized Standards:

The 2012 International Swimming Pool & Spa Code Section 305 Barrier Requirements is as follows:

305.1 General. The provisions of this section shall apply to the design of *barriers for aquatic vessels*. These design controls are intended to provide protection against the potential drowning and near drowning by restricting access to such vessels. These requirements provide an integrated level of protection against potential drowning through the use of physical barriers and warning devices.

Exceptions:

1. Spas and hot tubs with a lockable safety cover that complies with ASTM F 1346.
2. Swimming Pools with a *powered safety cover* that complies with ASTM F 1346.

The 2012 International Swimming Pool & Spa Code is not adopted by the State of Minnesota nor is it adopted locally by the City of Lake Elmo, but it is a nationally recognized document and suitable for reference as such.

Both Sides of the Argument:

There are a wide range of opinions and statistics surrounding this topic. They range from individual property owners rights to Safety Barrier Guidelines established by the US Consumer Product Safety Commission.

Property owner rights advocates argue that their pool is on private property and they should not have to incur the additional expense of a fence to protect someone who may potentially be trespassing on private property.

Safety advocates will argue that the fence/barrier requirements are intended to protect individuals who do not understand the definition of trespassing due to age or mental capacity.

For Council consideration:

1. Do nothing: Leave the existing ordinance requiring a fence around pools in place.
2. Add an exception to current city ordinance allowing the installation of a powered safety cover that complies with ASTM F 1346 in lieu of the required fence.
3. Add a path for an alternative, a hybrid exception that requires research and scrutiny similar to the ordinance used by the City of Maplewood. This would allow consideration of the use of a powered safety cover in lieu of a fence but would essentially require the applicant present the facts that their pool would not present an unsafe application to others.
 - a. Items that might be considered:
 - i. Distance of the pool to adjacent property lines
 - ii. Size of the overall property and location of the pool
 - iii. Other considerations?

City Attorney Input:

The city attorney was sought for opinion and offered the following:

Per Sarah Sonsalla:

“Ultimately the City can decide whether it wants to allow pool covers as an alternative to fences. However, if it does allow covers, it should be sure to require that the covers meet the technical standards of F1346-91 of ASTM...”

“While pool covers have some susceptibilities that fences do not (i.e. mechanical failures, human error, difficulties in enforcement), it appears that other cities have deemed them an acceptable alternative. In every example, the cover is required to meet the ASTM standards mentioned above...”

“If Lake Elmo wants to consider allowing covers as an alternative, we would advise that it’s a policy decision that the City can make based on any research/studies that it might want to consider.”

*Note: the above referenced ASTM F 1346-91 standard in the city attorney’s reference has been updated to ASTM F 1346–10 (2010 edition)

📖 CHAPTER 11: GENERAL CODE PROVISIONS

📖 § 11.01 DEFINITIONS.

SWIMMING POOL. Any permanently located pool , used for swimming and/or bathing which is over 24 inches in depth, or which as a surface area exceeding 150 square feet.

SWIMMING POOL , PRIVATE OR RESIDENTIAL. Any pool which is used, or intended to be used, as a swimming pool in connection with a single-family residence, and which is available only to the family of the household and private guests.

SWIMMING POOL , PUBLIC OR SEMI-PUBLIC. Any swimming pool other than a private swimming pool .

151.085 SWIMMING POOLS; GENERALLY.

(A) *Permits required.* No person, corporation, partnership, or firm shall construct, repair, enlarge, alter, change, remodel, or otherwise significantly improve a swimming pool in the city without first having obtained a permit from the Building Official.

(B) *Definitions.* Unless specifically defined in this section, common definitions, words, and phrases used in this section shall be interpreted so as to give them the same meaning as they have in common usage through this code. Definitions are found in § 11.01.

(C) *Application for permit.* The Building Official may require plans, specifications, and pertinent explanatory data be submitted with an application for a permit.

(1) An application for a permit which includes a site plan showing:

(a) The type and size of pool, location of pool, location of house, garage, fencing, and other improvements on the lot;

(b) The location of structures on all adjacent lots;

(c) The location of filter unit, pump, and writing indicating the type of the units;

(d) The location of back-flush and drainage outlets, grading plan, finished elevations, and final treatment (decking, landscaping, and the like) around pool;

(e) The location of existing overhead or underground wiring, utility easements, trees, and similar features;

(f) The location of any water heating unit;

(g) The location of water supply systems, buried sewers, and sewage disposal systems, other utilities and proximate sources of possible contamination of the pool; and

(h) All dimensions, including the length, width, depth of the pool, the size of the pool deck, and the liquid capacity of the pool; plans shall be drawn to a scale of not smaller than 1/4 inch to 1 foot;

(2) The application shall be accompanied by the permit fee the Council establishes by resolution.

(3) Pools shall not be located within 20 feet of any septic tank/drainfield nor within 6 feet of any principal structure or frost footing. Pools shall not be located within any required front or side yard setbacks.

(4) Pools shall not be located beneath overhead utility lines nor over underground utility lines of any type.

(5) Pools shall not be located within any private or public utility, walkway, drainage, or other easements.

(6) In the case of underground pools, the necessary precautions shall be taken during the construction, to:

(a) Avoid damage, hazards, or inconvenience to adjacent or nearby property; and

(b) Assure that proper care shall be taken in stockpiling excavated material to avoid erosion, dust, or other infringements upon adjacent property.

(7) All access for construction shall be over the owner's land and due care shall be taken to avoid damage to public streets and adjacent private or public property.

(8) (a) To the extent feasible, back-flush water or water from pool drainage shall be directed onto the owner's property or into approved public drainage ways.

(b) Water shall not drain onto adjacent or nearby private land.

(9) The filter unit, pump, heating unit, and any other noise-making mechanical equipment shall be located at least 50 feet from any adjacent or nearby residential structure and not closer than 10 feet to any lot line.

(D) *Pool piping.* Pool piping systems shall be constructed of materials prescribed in the city plumbing code. Installation of the piping, including the pool water supply line, shall be inspected by the Building Official prior to covering the piping.

(E) *Main outlets.* Pools shall be equipped with facilities for completely emptying the pool and effecting surface drainage (by gravity if elevations permit). The drainage system shall be constructed in accordance with the provisions of the city plumbing code.

(F) *Water supply.* Water supplies serving all swimming pools shall be of a safe sanitary quality and be acceptable to the County Health Officer. The installation of the pool water supply piping and connection to the source of supply shall be in accordance with the city plumbing code.

(G) *Electrical requirements.* All electrical installations provided for, installed, and used in conjunction with residential swimming pools shall conform with the state electrical code and shall be inspected and approved by the state electrical inspector. No current-carrying electrical

conductors shall cross residential swimming pools, either overhead or underground or within 15 feet of the pools, except as necessary for pool lighting or pool accessories.

(H) *Heating requirements.* Permits shall be required for all heating units used in conjunction with swimming pools. Installation shall be made in accordance with the city heating building code in effect at the time of installation.

(I) *Pressure relief valves.* Pools shall be designed and constructed with under-drain systems and pressure relief valves to prevent pool flotation, where the Building Official determines the same to be necessary.

(J) *Shield lights.* Lights used to illuminate any swimming pool shall be so arranged and shielded so as to reflect light away from adjoining properties.

(K) *Location.* All swimming pools or appurtenances to swimming pools shall be located in the rear yard and meet the setback requirements of the district in which it is located. Requests for a variance from the provisions of this section shall be referred first to the Planning Commission for its study and recommendation and then to the Council.

(L) *Fences.* All swimming pools shall be completely enclosed by a non-climbable type fence. All fence openings or points of entry into the pool area shall be equipped with gates. The fence and gates shall be at least 4 feet in height and shall be constructed of a minimum number 11 gauge woven wire mesh corrosion-resistant material or other material approved by the Building Official. All gates shall be equipped with self-closing and self-latching devices placed at the top of the gate or otherwise be inaccessible to small children. All fence posts shall be decay or corrosion resistant and shall be set in concrete bases or other suitable protection. The openings between the bottom of the fence and the ground or other surface shall not be more than 4 inches.

~~(M) *Safety equipment.* Every swimming pool shall be equipped with 1 or more throwing ring buoys not more than 15 inches in diameter and having 50 feet (or the diagonal measurement of pool whichever is larger) of 3/16 inch nylon line (or equivalent) attached.~~

(N) *Above-ground swimming pools.* Ladders or stairs which are attached to or placed against the outside of above-ground tank-type swimming pools having a depth of 24 inches or more shall be removed from the outside of the pool when it is not being used by the owner or owner's authorized guests. All other applicable provisions of this section shall apply to above-ground pools.

(O) *Public or semi-public swimming pools.* Swimming pools other than residential pools shall be constructed and operated in conformance with standards for the installations established by the Minnesota State Board of Health. In addition, the person, firm, corporation, or agency proposing the construction of a swimming pool other than residential shall file with the Building Official, prior to the beginning of any construction, a copy of the report prepared and issued by the Minnesota State Health Department showing approval of the plans, and 1 set of pool plans upon which the approval is indicated by stamp, seal, or other official marking of that agency.