

# **Public Health Division**

**Oregon Administrative Rules** 

Chapter 333 - Division 60

**Public Swimming Pools** 

This information is available in alternate format from the Oregon Department of Human Services - Health Services Public Swimming Pool Program at (971) 673-0448.

You may also obtain the rules from these websites:

http://oregon.gov/DHS/ph/pl/ http://arcweb.sos.state.or.us/rules/OARS\_300/OAR\_333/333\_060.html

Current Revision
December 23, 2009
First Published – January 10, 2010

# OREGON ADMINISTRATIVE RULES CHAPTER 333 - HEALTH DIVISION DIVISION 60 PUBLIC SWIMMING POOL RULES

# Purpose 333-060-0005

These rules adopted pursuant to the provisions of ORS 448.011, prescribe the requirements for the construction and operation of public swimming pools, wading pools and bathhouses. They are for the purpose of protecting the health, safety, and welfare of persons using those facilities.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.011

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0076; HD 26-1982(Temp), f. & ef. 12-6-82; HD 7-

1986, f. & ef. 5-1-86

# Adoption by Reference 333-060-0010

Outside standards, listings and publications referred to in these sections are by reference made a part of these rules.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 183.355

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0081; HD 26-1982(Temp), f. & ef. 12-6-82

#### **Definitions 333-060-0015**

As used in these rules unless otherwise required by context:

- (1) "**Administrator**" means the State Public Health Director or designee of the Department of Human Services, Public Health Division.
- (2) "**Approved**" means approved in writing by the Division.
- (3) "Athletic club" means a facility constructed to provide athletic or physical conditioning for its members, guests and/or patrons. It includes but is not limited to racquetball clubs, health spas, fitness facilities, aerobics, etc.
- (4) "**Bathhouse**" means a structure which contains dressing rooms, showers and toilet facilities for use with an adjacent public swimming pool.
- (5) "**Builder**" means a person who, in the pursuit of an independent business, undertakes, or offers to undertake, or submits a bid, to construct, alter, repair, or improve any public swimming pool, spa pool or bathhouse and the appurtenances thereto.

- (6) "Certified Operator" means a person performing the duties of the responsible supervisor, and responsible for providing direction and training to non-certified responsible supervisors and other pool personnel in regards to pool maintenance and operation. This person shall be certified by an organization providing training in pool safety, maintenance and operation recognized by the Division. Such courses and organizations include the Certified Pool Operator Program, by the National Swimming Pool Foundation, and the Aquatic Facility Operator Program, by the National Recreation and Parks Association, or equivalent, as determined by the Division.
- (7) "Cross connection" means an unprotected connection between the piping carrying potable water and the piping or fixtures which carry other water or other substances.
- (8) "**Division**" means the Department of Human Services, Oregon State Public Health Division.
- (9) "General-use Public Swimming Pool" means any public swimming pool other than a limited-use public swimming pool. Public swimming pools operated in conjunction with a companion facility but not limited to use of the residents, patrons or members of the companion facility are general-use swimming pools.
- (10) "Guest protection zone" means a defined and prescribed area of a swimming pool or aquatic feature. A designated lifeguard is responsible for scanning a guest protection zone. Scanning refers to the actions performed by the lifeguard to visually survey and continuously and comprehensively monitor the guest protection zone.
- (11) "10/20 Guest Protection Standard" means using a lifeguard planning standard that will place guards in numbers and locations, with identified areas of responsibility, so that they can theoretically identify a victim within 10 seconds and reach the victim within 20 more seconds. This is only a planning tool and actual response times will vary depending on the abilities of the lifeguard, their alertness, their vigilance and what else is happening in the pool.
- (12) "**Horseplay**" means any unsafe activity, which in the opinion of the Division or the pool operator endangers the pool users and/or bystanders.
- (13) "**Instructor**" means a currently certified American Red Cross Water Safety Instructor, YMCA Swim Instructor, or a person having equivalent certification as determined by the Division.
- (14) "**Lifeguard**" means a person holding current certification in the following three areas:
  - (a) Lifeguard certification. Certification in one of the following:
    - (A) American Red Cross Lifeguard Training;
    - (B) Young Men's Christian Association (YMCA) Lifeguarding;
    - (C) International Lifeguard Training Program (ILTP) for deep water;
    - (D) Starfish Aquatics Institute StarGuard; or
    - (E) Other lifeguard training approved by the Division.

- (b) First aid certification. Certification in one of the following:
  - (A) American Red Cross First Aid;
  - (B) American Safety and Health Institute Universal Basic First Aid:
  - (C) Emergency Medical Planning America Medic First Aid (MFA); or
  - (D) Other equivalent First Aid Course approved by the Division.
- (c) CPR certification. Certification in one of the following:
  - (A) American Red Cross CPR for the Professional Rescuer;
  - (B) American Heart Association Healthcare Provider CPR:
  - (C) American Safety and Health Institute CPR Pro for the Professional Rescuer; or
  - (D) Other equivalent CPR training approved by the Division.
- (15) "Limited-use Public Swimming Pool" means any public swimming pool located at and operated in connection with a companion facility such as a residential housing facility having five or more living units, travelers' accommodations, mobile home park, recreation park, boarding school, organizational camp, dude ranch, club or association where use of the pool is limited to residents, patrons or members of the companion facility.
- (16) "**Person**" includes, in addition to the definition in ORS 174.100, municipalities, recreation districts, counties and state agencies, instrumentalities, or builder.
- (17) "**Private Swimming Pool**" means any swimming pool, wading pool or spray pool owned by no more than four individuals, either jointly, individually or through association, incorporation or otherwise, and operated and maintained in conjunction with a companion residential housing facility having no more than four living units, for the use of the occupants thereof and their personal friends only. Private pools shall not be subject to the provisions of these rules.
- (18) "**Public Spa Pool**" means any public swimming pool or wading pool designed primarily to direct water or air-enriched water under pressure onto the bather's body with the intent of producing a relaxing or therapeutic effect.
- (19) "**Public Swimming Pool**" means an artificial structure, and its appurtenances, which contains water more than two feet (600mm) deep which is expressly designated or which is used with the knowledge and consent of the owner or operator for swimming or recreational bathing and which is for the use of any segment of the public. "Public swimming pool" includes, but is not limited to, swimming pools owned or operated by:
  - (a) Traveler's accommodations;
  - (b) Recreation parks;
  - (c) Colleges;
  - (d) Schools;

- (e) Organizational camps as defined in ORS 446.310;
- (f) Clubs;
- (g) Associations;
- (h) Business establishments for their patrons or employees;
- (i) Private persons and that are open to the public;
- (j) Recreation districts;
- (k) Municipalities;
- (1) Counties; or
- (m) A state agency.
- (20) "**Public Wading Pool**" means an artificial structure, and its appurtenances, which contains water less than two feet (600mm) deep which is expressly designated or which is used with the knowledge and consent of the owner or operator for wading or recreational bathing and which is for the use of any segment of the public, whether limited to patrons of a companion facility or not. Special types of wading pools include but are not limited to:
  - (a) "**Spray Pool**" or "**Water Playground**" meaning a wading pool containing spray features intended for recreational use, but that does not allow water to pond in the basin. Spray pools or water playgrounds that do not pond water and use potable water once then send it to waste are not regulated by these rules.
  - (b) "Interactive Fountain" meaning a wading pool designed for esthetic appreciation, which is expressly designated or which is used with the knowledge and consent of the owner or operator for wading or recreational bathing by any segment of the public. Interactive fountains are a type of wading pool. Interactive fountains that do not pond water and use potable water once then send it to waste are not regulated by these rules.
  - (c) "**Non-Regulated Fountain**" means a fountain designed and operated solely for visual appreciation and for that function only. The Division does not license or regulate this type of fountain.
- (21) "**Responsible Supervisor**" means a person, or persons, designated by the operator to provide emergency assistance to patrons, maintain order and enforce pool use regulations, governing safety and sanitation, including pool closure, and who is knowledgeable about pool maintenance and operation and the testing of pool water.
- (22) "**Shallow Water Lifeguard**" means a person with training in the skills needed to lifeguard in four feet (1.2 m) of water or less. This person shall have current certification in:
  - (a) International Lifeguard Training Program (ILTP) for shallow water guards;
  - (b) Starfish Aquatics Institute StarGuard with a competency assessment designation of three feet of water or less, or;

- (c) Equivalent training, as approved by the Division.
- (23) "**Special-use pool**" means a public swimming pool which is designed specifically for sporting or recreational purposes and may include but are not limited to special features such as wave pools, diving pools, splash pools, zero depth pools, portable slides, and water slides.
- (24) "**Supplemental Disinfectant**" means a disinfectant which is intended to augment water quality in a public swimming pool or spa and will provide disinfection in conjunction with the approved disinfectant.
- (25) "Swimming Pool" means an artificial structure, basin, chamber or tank used for wading, swimming, diving, water recreation, therapy or bathing. It does not include facilities where the water is drained after each use, when such facility has no heater, filter, or sanitizing equipment or spray pools that use potable water once and send to waste and that do not pond water in the basin. Types of pools are as follows:
  - (a) "Combination pool" means a pool used for swimming and diving, having both shallow and deep portions.
  - (b) "**Diving pool**" means a pool used exclusively for diving.
  - (c) "Exercise pool" means a pool small in area and of shallow depth usually associated with a health spa.
  - (d) "Mobile pool" means a pool constructed on a mobile structure which can be transported from place to place.
  - (e) "Reverse flow pool" means a pool of a design in which the water enters at the bottom and leaves at the water line.
  - (f) "**Spa**" means a relatively small pool which uses high temperature water and which may include a water agitation system or air-enriched water under pressure, with the intent of producing a relaxing or therapeutic effect. A spa is sometimes called a whirlpool.
  - (g) "**Special-use pool**" means a pool used for a purpose not otherwise defined, such as for apparatus swimming, diving, and underwater photography training, therapy, or other use by the public.
  - (h) "**Spray Pool**" means a type of wading pool that provides water for recreational bathing through the use of sprays, fountains, buckets or other means, that allows the water to run by gravity to a drain and does not pond water in the basin. Spray pools that use potable water once and waste it to the drain without ponding of the water are not regulated by these rules.
  - (i) "Wading Pool" means a shallow pool used primarily by children, and designed to have a water depth no greater than 24 inches.
  - (j) "Waterslide plunge pool" means a pool located at the exit end of a waterslide flume and intended and designed to receive sliders emerging from the flume.

(k) "Water recreation attraction" means a special-use pool designed and intended for recreational use with special design or operational features that provide the patron recreational activity which may be different from that associated with a conventional swimming pool, and that purposefully involves immersion of the body partially or totally in the water.

Note: Examples of water recreation attractions are waterslide plunge pools, lazy or slow rivers, tubing pools, and wave pools.

- (l) "Wave pool" means a pool designed for generating waves for recreational purposes.
- (m) "**Zero-depth pool**" means a pool having a bottom slope which continues through decreasing depth until the bottom joins with the deck around either part or all of the pool perimeter. It may have no walls, or may have walls around part of the perimeter.
- (26) "Variance" means written permission from the Division for a public swimming pool, public spa pool or public wading pool to be operated when it does not comply with all the applicable rules for public swimming pools, public spa pools or public wading pools.
- (27) "Waterpark slide" means a slide at a public pool which has a length of at least twenty feet (6.1m), not including the platform.

Stat. Auth.: ORS 448.011

Stats. Implemented:ORS 448.005 - 448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79, Renumbered from 333-042-0086; HD 7-1986, f. & ef. 5-1-86; HD 17-1991, f. & cert. ef. 10-15-91; HD 22-1994, f. 8-22-94, cert. ef. 9-1-94; PH 17-2006, f. 6-30-06, cert. ef. 7-1-06; PH 10-2007, f. & cert. ef. 7-13-0

# **Compliance 333-060-0020**

- (1) Swimming pools and wading pools which were in public use before May 13, 1959, shall not be required to comply with Structural Stability, OAR 333-60-050 (2); and Dimensions, OAR 333-60-060 (3) and (4), provided such pools are operated in compliance with all other rules of the Division relating to public swimming pools.
- (2) All swimming pools and wading pools which were constructed and in use but were not in public use as defined in Definitions, OAR 333-60-015 (19), and were not licensed by the State Board of Health before June 10, 1959, shall before being operated for any public use, have complete and detailed plans submitted to the Department. A license to operate as a public pool shall not be issued until the pool is made to comply with the requirements of these rules.
- (3) Any public wading pool constructed before July 1, 2006, but not licensed by the Department or it agent health department before that date, must obtain a license to operate.
  - (a) Wading pools, other than spray pools, without water recirculation must comply with the requirements of OAR 333-060-0510(1) or must cease operation.

- (b) All existing wading pools must provide entrapment, hair entanglement and evisceration protection in compliance with OAR 333-060-0510(2), or cease operation by December 31, 2008.
- (4) Any limited-use swimming pool operated in conjunction with a companion residential housing facility having 5 or more living units and which was operated and maintained for the use of the occupants thereof and their personal friends only, but which was not required to be licensed prior to February 25, 1971, shall not be required to comply with Structural Stability, OAR 333-60-050 (2); Dimensions, OAR 333-60-060 (3), (4) and (5)(a); Piping, OAR 333-60-130 (1), (2), and (3); and Overflow Systems, OAR 333-60-115 (2)(b), (3) and (4); provided such pools are operated in compliance with all other requirements of these rules.
- (5) Public swimming pools built prior to March 1, 1979, are exempt from the following requirements of these rules provided such pools are operated in continuous compliance with the rules in effect at the time such pools were constructed:
  - (a) Dimensions, OAR 333-60-060 (2), (5)(a)(B), (5)(b);
  - (b) Finishes, Markings and Lifelines, OAR 333-60-065 (3);
  - (c) Ladders, Recessed Steps and Stairways, OAR 333-60-080 (7), (8);
  - (d) Decks, OAR 333-60-110 (1)(a), (2), (6), (7);
  - (e) Overflow Systems, OAR 333-60-115 (3);
  - (f) Recirculation Systems, OAR 333-60-120 (2)(c);
  - (g) Inlets and Outlets, OAR 333-60-125 (2), (4);
  - (h) Piping, OAR 333-60-130 (1), (4)
  - (i) Pumps, OAR 333-60-135 (1)(a), (b),(4);
  - (j) Filters, OAR 333-60-140 (2)(a) -- (d), (6), (7);
  - (k) Heaters, OAR 333-60-145 (1)(c);
  - (1) Disinfectant and Chemical Feeders, OAR 333-60-150 (4)
  - (m) Equipment Room, OAR 333-60-160 (1);
  - (n) Bathhouse and Sanitary Facilities, OAR 333-60-170 (3)(a), (b);
  - (o) Signs, OAR 333-60-215 (1), (2) and (3).
- (6) The exemptions of subsections (1), (2), (3), and (4) of this section apply provided the exemption does not present a health or safety hazard. Exemptions do not apply to any alteration or replacement of affected component part.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005-448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79, Renumbered from 333-042-0088; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-94, cert. ef. 9-1-94; PH 17-2006, f. 6-30-06, cert. ef. 7-1-06; PH 20-2006(Temp), f. & cert. ef. 9-15-06 thru 3-13-07; PH 29-2006, f. & cert. ef. 12-13-06

#### Permit to Construct 333-060-0025

- (1) No person shall construct a public swimming pool, public wading pool, or bathhouse adjacent thereto, or alter any such structures without:
  - (a) Submitting complete plans and specifications to the Division;
  - (b) Receiving a written plan approval or conditional approval from the Division;
  - (c) Paying a construction permit fee to the Division;
  - (d) Receiving a permit to construct from the Division.
- (2) Plans, specifications, and fees required herein shall be submitted at the time of filing application for a construction permit.
- (3) No person shall deviate from the approved or conditionally approved plans and specifications during the construction or alteration of a facility described in (1) of this section without the written approval of the Division.
- (4) Construction permits will be issued only to the owner or authorized agent of the owner.
- (5) The Division may issue a conditional construction permit where the plans and specifications for the proposed public swimming pool demonstrate a new technology or alternative mode of operation not contemplated in these rules. Such a permit may be issued only when the proponent of the facility has provided information to the Division from which the Division determines that the swimming pool may be reasonably expected to:
  - (a) Operate continuously in a clean and sanitary manner;
  - (b) Not constitute a menace to public health or safety; and
  - (c) Provide health and safety protection equal to or greater than that required by these rules.
- (6) The conditional permit may impose conditions which will be set forth in a license for operation. These conditions may include but not be limited to submission of monitoring reports, sampling requirements, use restrictions, and such other conditions as the Division may deem necessary to protect the public health and safety or to establish further the Division's expectancy of such protection. Furthermore, any license issued subject to a conditional permit shall carry the condition that by its acceptance the holder understands that a conditional license may not be renewed, may be revoked or suspended, or a permanent license not issued in the future, if the Division determines that the provisions of (5)(a), (b), and (c) of this section are not met. Such conditional construction permit authority is not conferred upon any county notwithstanding any delegated or contractual authority in administration and enforcement of the public swimming pool statutes and rules.

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79, Renumbered from 333-042-0091; HD 26-1982(Temp), f. & ef. 12-6-82; HD 8-

1983, f. & ef. 5-27-83; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-94, cert. ef. 9-1-94

#### Plans 333-060-0030

- (1) Plans and specifications shall be prepared by a professional engineer or architect registered in the State of Oregon. Specific exemptions to this requirement may be granted by the Division, where in the judgment of the Division no architectural or engineering problems are presented and the plans accurately depict the proposed pool and address all requirements of these rules.
- (2) Plans shall be submitted in duplicate, drawn to scale and shall include:
  - (a) One plan view.
  - (b) One longitudinal section.
  - (c) One transverse section through the main drain.
  - (d) One overall plan showing the pool in relation to other facilities in the area. (This plan may be combined with (2)(a) of this section.)
  - (e) One detailed view of the equipment room layout.
  - (f) One vicinity map.
  - (g) One piping schematic showing piping, pipe size, inlets, main drains, skimmers, gutter outlets, vacuum fittings, and all other appurtenances connected to the pool piping system. (This plan may be combined with (2)(a) of this section.)
  - (h) One cross section of the step treads and risers.
- (3) Plan notes such as "fence by owner" or "deck to be under separate contract" shall not be acceptable as a substitute for scale drawings.
- (4) Plans shall include the following information in tabulated form:
  - (a) Legal address of the facility.
  - (b) Location of the facility if different from legal address.
  - (c) Owner's name, address and telephone number.
  - (d) Surface area of pool.
  - (e) Pool volume, turn over time, flow rate, filter rate/unit area, type of filter and total system head loss.
  - (f) Manufacturer, make and model numbers of the pump, filter and automatic chemical feed apparatus, filter head loss (clean and dirty), and pump curve showing design flow rate and head.
  - (g) Source of water used at the pool.
  - (h) Means of disposing backwash water.

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79, Renumbered from 333-042-0096; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-94, cert. ef. 9-1-94

#### Licenses 333-060-0035

No person shall operate a public swimming pool or public wading pool without:

- (1) Securing an approved final construction inspection from the Department or its agent; or, if an unlicensed wading pool constructed before July 1, 2006, a compliance inspection showing items of non-compliance that need to be corrected before license issuance or the need to comply with the requirements of OAR 333-060-0510;
- (2) Making application for a license to operate such pool;
- (3) Paying the license fee; and
- (4) Securing a license from the Division or delegate county health department
- (5) Such license terminates and is renewable on December 31 of each year.

Stat. Auth.: ORS 448

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79, Renumbered from 333-042-0098; HD 24-1983(Temp), f. & ef. 12-16-83; HD 7-

1986, f. & ef. 5-1-86; PH 17-2006, f. 6-30-06, cert. ef. 7-1-06

#### Conditional Licenses 333-060-0040

- (1) Conditional licenses may be issued by the Division in circumstances where:
  - (a) There is substantial compliance with these rules;
  - (b) A written schedule for total compliance approved by the Division is instituted and maintained; and
  - (c) In the judgment of the Division, there is no immediate threat to the health and safety of bathers during the time in which complete compliance is attained. The Division may also require special safeguards to be instituted and maintained as a condition of the conditional license.
- (2) Conditional licenses may also be issued by the Division, as provided in OAR 333-60-025 (5).

Stat. Auth.: ORS 448.011

Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79, Renumbered from 333-042-0101; HD 26-1982(Temp), f. & ef. 12-6-82; HD 8-

1983, f. & ef. 5-27-83; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-94, cert. ef. 9-1-94

### Maintenance and Modification 333-060-0045

- (1) All equipment of public swimming pools and public wading pools shall be operational and shall be kept in good repair. Such equipment shall be maintained in conformance with the original design or better.
- (2) The structural components of all public swimming pools and their appurtenances shall be maintained in good repair.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79, Renumbered from 333-042-0103; PH 17-2006, f. 6-30-06, cert. ef. 7-1-06

# Structural Stability 333-060-0050

- (1) All public swimming pools and public wading pools shall be watertight, constructed of waterproof and enduring materials compatible with the swimming pool environment and shall be designed to withstand all anticipated loading for both pool-empty and pool-full conditions.
- (2) Where a high water table may be encountered, provisions shall be made for relief of hydrostatic pressure from under the pool floor and/or around the pool walls.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79, Renumbered from 333-042-0106; PH 17-2006, f. 6-30-06, cert. ef. 7-1-06

#### Size 333-060-0055

Public swimming pools shall be sized according to and shall not exceed the design limit of the user load functions shown below. User loads are specific in-pool loads only. Area of deep water, "D" equals the surface area of the pool greater than five feet (1.5m) deep. Area of shallow water, "S" equals the surface area of the pool less than five feet (1.5m) deep. Surface area, "A" equals the area of the entire pool.

(1) Outdoor swimming pools with a Max. load = (D / 27) + (S / 15) surface area of more than 2000 square feet.

(2) Outdoor swimming pools with a Max. load = A / 24 surface area of less than 2000 square feet.

(3) Indoor swimming pools. Max. load = A / 24

(4) Spray pools, wading pools. Max. load = A / 24

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79, Renumbered from 333-042-0108; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94

#### **Dimensions 333-060-0060**

- (1) Public swimming pools and public wading pools shall have no sharp edges or protrusions where walls meet at an acute angle. Public swimming pools and public wading pools shall be shaped so as to provide for complete water recirculation and mixing. Walls in public wading pools must be vertical with a 3 to 6-inch (75 150 mm) radius at the pool wall/ pool floor juncture.
- (2) There shall be no wall ledges in public swimming pools.
- (3) Public swimming pools shall be not less than 3' (90cm) nor more than 3'6" (105cm) in depth at their shallowest point.

- (4) Walls in public swimming pools shall be vertical or within 11 degrees of vertical for a minimum distance of 2'9" (82.5cm) in deep areas or 2'6" (75cm) in shallow areas from which point they may be radius to join the floor.
- (5) (a) Break in grade shall occur at dept no shallower than 5' (1.5m), except pools built prior to March 1, 1979, shall be uniform to a depth of 4'6" (1.4m), and shall not exceed the following:
  - (A) General-use pools: 1' of fall in 12' (30cm in 3.7m) horizontally;
  - (B) Limited-use pools: 1' of fall in 10' (30cm in 3m) horizontally.
  - (b) Floor slopes in the transition area between the deep and shallow portions of the pool shall not exceed 1' of fall in 3' (30cm in 90cm) horizontally.
- (6) The wall-floor transition radius shall:
  - (a) Have its center no less than 2'9" (82.5cm) below the surface of the water in deep areas or 2'6" (75cm) in shallow areas;
  - (b) Be tangent to the wall;
  - (c) Be less than or equal to the depth of the pool minus the vertical wall depth measured from the water line in deep areas minus 3" (7.5cm), to allow draining to the main drain. (R maximum = Pool Depth Vertical Wall Depth 3" (7.5cm).
- (7) Pools intended for diving shall comply with OAR 333-60-085.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79, Renumbered from 333-042-0111; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94; PH 17-2006, f. 6-30-06, cert. ef. 7-1-06

# Finishes, Markings and Lifelines 333-060-0065

- (1) (a) Wall and floor finishes shall be of non-toxic materials, shall be impervious and enduring. Such finishes shall be smooth and easily cleanable.
  - (b) Floors and walls of public swimming pools and public wading pools shall be white, of a light color or a light-colored pattern.
- (2) A lifeline shall be provided 2'(60cm) on the shallow side of the break in grade between shallow and deep portions of the pool. Where there is a uniform slope, a lifeline is not required.
  - (a) This lifeline shall be securely fastened to wall anchors. Wall anchors shall be of corrosion-resistant materials and shall be recessed or have no projections which constitute safety hazards when the lifeline is removed. Pools built prior to March 1, 1979 shall comply with this section at such time as the interior pool finish is repaired.
  - (b) The lifeline shall be marked with visible floats at not greater than 7' (2.1m) intervals. The line shall be of sufficient size and strength to offer a good handhold and to support loads normally imposed by bathers.

- (c) The lifeline shall lie in place except when pool use is restricted to lap swimming by competent swimmers or to supervised swimming instruction by a certified swim instructor.
- (3) The break in grade of the pool shall be marked with a 4" (10cm) minimum width of floor tile or painted stripe of a color contrasting with the bottom. Where there is a uniform slope, a stripe is not required.
- (4) Depth of water (in feet) shall be plainly and conspicuously marked above or at the water level on the vertical pool wall except for splash-out (deck level overflow) pools and on the top of the coping or edge of the deck or walk next to the pool. There shall be such markers at the maximum and minimum depth points and at 1' (30cm) depth increments in the shallow portion of the pool. Depth markings shall be spaced at no more than 25' (7.6m) intervals. There shall be depth markings at slope breaks. Pools built prior to March 1, 1979 shall comply with this section pertaining to vertical pool wall markings when the interior pool finish is repaired or resurfaced.
- (5) Depth markings shall be at least 4" (10cm) in height and of a color contrasting with the background.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79, Renumbered from 333-042-0113; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94; PH 17-2006, f. 6-30-06, cert. ef. 7-1-06

### **Illumination 333-060-0070**

- (1) Where underwater lighting is used, not less than 0.5 watts incandescent or the equivalent shall be employed per square foot of pool area.
- (2) Where underwater lighting is used, and night or indoor swimming is permitted, area lighting shall be provided for the deck areas and directed away from the pool surface. No less than 0.6 watts incandescent or the equivalent per square foot of deck area shall be used.
- (3) Where underwater lighting is not employed and night or indoor swimming is permitted, area and pool lighting combined shall be provided at no less than 2 watts incandescent or the equivalent per square foot of deck area.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.011

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79, Renumbered from 333-042-0116; HD 7-1986, f. & ef. 5-1-86

#### **Ventilation 333-060-0075**

Buildings enclosing swimming pools and public wading pools shall be ventilated in accordance with the requirements of the Oregon State Structural Specialty Code, 1993 Edition, as amended by the Building Codes Agency, adopted January 1, 1993. New and renovated public swimming and wading pool ventilation systems must comply with the requirements of the Oregon State Structural Specialty Code, 2004 Edition, as amended by the Building Codes Agency, adopted October 1, 2004

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the agency.]

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79, Renumbered from 333-042-0118; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94; PH 17-2006, f. 6-30-06, cert. ef. 7-1-06

# Ladders, Recessed Steps and Stairways 333-060-0080

- (1) All public swimming pools shall have a ladder, set of recessed steps or stairway located at 75'(22.9m) intervals around the pool perimeter, with a minimum of two such means of egress.
- (2) There shall be at least one ladder, set of recessed steps or stairway at the shallow end and another at the deep end of the pool.
- (3) Ladder treads, recessed step surfaces and stairs shall have slip-resistant surfaces.
- (4) (a) Ladders and recessed steps shall be provided with two handrails.
  - (b) Stairways shall be provided with at least one handrail.
- (5) Recessed steps shall drain into the pool.
- (6) Ladders, recessed steps and stairways shall be located so as not to interfere with racing lanes.
- (7) Stairway treads shall have a minimum unobstructed horizontal tread depth of 10" (25cm) and a minimum unobstructed surface area of 240 square inches.
- (8) Risers at the centerline of the stairway treads shall have a maximum uniform height of 12" (30cm). The vertical riser height from deck surface down to the top of the first tread shall not exceed 12" (30cm).
- (9) Ladders and handrails shall be securely mounted.

Stat. Auth.: ORS 448 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0121; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94

# Diving 333-060-0085

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- (1) Public swimming pools used for diving shall provide water depths and lateral and vertical clearance as follows:
  - (a) Pools constructed after May 1, 1986 shall comply with the minimum dimensions of Figure 1, Table 1.
  - (b) Pools constructed prior to May 1, 1986 shall comply with the minimum dimensions of Figure 2, Table 2.
- (2) There shall be at least 16'(4.9m) of unobstructed vertical clearance above any diving board measured from the center of the front end of the board. This clearance shall extend horizontally 8' (2.4m) behind, 16' (4.9m) in front, and 8' (2.4m) to each side of the end of the board.
- (3) (a) Diving boards one meter or more in height above the water shall be equipped with a stairway or ladder and two handrails.
  - (b) Diving boards one meter or higher shall be protected with guard rails, one on each side of the board. Such guard rails shall extend to the edge of the pool wall.
- (4) Diving platforms higher than three meters shall not be installed at public swimming pools without the approval of the Division.

[**ED. NOTE**: Tables referenced are available from the agency.]

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0123; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94

#### Slides 333-060-0090

- (1) Slides shall comply with the requirements of the U.S. Consumer Product Safety Commission Safety Standards for Swimming Pool Slides as published in the Code of Federal Regulations Vol. 16, Part 1207, Pages 265-281 (16 CFR Part 1207).
- (2) Slides shall:
  - (a) Be sturdily constructed of corrosion-resistant material;
  - (b) Be securely fastened to the pool deck;
  - (c) Have a ladder equipped with slip-resistant treads and rigidly attached handrails;
  - (d) Have runways which are smooth, of one piece, and free of cutting, pinching, puncturing or abrasion hazards;
  - (e) Have slide runways which are provided with side rails on both sides; such side rails shall be no less than 2" (5cm) in height.
- (3) Slide runways shall be water lubricated when in use.
- (4) There shall be no slides higher than 12' (30cm) above the water level.

(5) Water depths 4.5' (1.4m) beyond the end of the slide shall be based on the slide height as follows:

Height	Minimum Water Depth
More than 3 feet (90cm) up to 7.5 feet (2.3m)	4 feet (1.2m)
More than 7.5 (2.3m) feet up to 8 feet (2.4m)	5 feet (1.5m)
More than 8.0 feet (2.4m) up to 11 feet (3.4m)	5.5 feet(1.7m)
More than 11.0 feet (3.4m) up to 12 feet (3.7m)	6 feet (1.8m)

- (6) Slides shall be equipped with the warning signs found in Figure 3.
- (7) Portable toddler slides (3 feet or less)(90cm) shall have an entry into water depths which are recommended by the manufacturer and approved by the Division or delegate county. Water depths for slide entry are determined by but not limited to platform height, length of slide, and weight of bather.

**[ED. NOTE**: Figures referenced are available from the agency.]

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 448.031 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0125; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94

# Waterpark Slides 333-060-0091

- (1) Waterpark slides installed after January 1, 1994 must comply with the requirements of the U.S. Consumer Products Safety Commission safety standards for Swimming Pool Slides as published in the Code of Federal Regulations Vol. 16, Part 1207, Pages 265-281 (16 CFR Part 1207).
- (2) Prior to entering the pool, the last ten (10) feet (3m) of the slide must be horizontal.
- (3) The slide shall be designed so that it enters the pool at or below the water level.
- (4) The pool shall be constructed of concrete or other structurally rigid, impervious materials with a smooth, slip resistant finish.

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- (a) There shall be a three and a half (3.5) foot (1m) minimum distance between the exterior slide wall and the adjacent vertical pool wall.
- (b) There shall be a minimum of twenty (20) feet (6.1m) between the slide exit and the opposite side of the pool, excluding steps.
- (c) Centerlines for multiple slides shall be parallel, a minimum of eight (8) feet (2.4m) apart, and not intersect for twenty (20) feet (6.1m).

- (d) The water depth at the slide exit shall be a minimum of three (3) feet (1m). This depth shall be maintained for a minimum distance of ten (10) feet (3m).
- (5) If a public pool is for the exclusive use of a waterpark slide splash area, the pool's recirculation system shall be designed to provide a 60 minute turnover rate.
- (6) During operation:
  - (a) Lifeguards shall be on duty at the slide splash area.
  - (b) The platform area shall have an attendant in place.
- (7) Entry shall be regulated at a minimum of ten (10) second intervals.
- (8) A sign shall be posted describing the proper way to use the slide. The sign shall include at least the following:

"Slide feet first only!"

"Slide sitting up or lying on your back! "

"Slide one at a time only!"

"Always enter the pool feet first! Do not somersault, twist, or dive from the end of the slide."

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 22-1994, f. 8-22-94, cert. ef. 9-1-94

# **Elevated Lifeguard Chairs or Platforms 333-060-0095**

- (1) Elevated lifeguard chairs or elevated lifeguard platforms shall be provided at all general-use swimming pools.
- (2) There shall be one lifeguard chair or elevated lifeguard platform for each 120 feet (36.6m) of pool perimeter and with the exception of (3) of this section may be spaced at the discretion of the pool operator.
- (3) Where more than one lifeguard chair or elevated lifeguard platform is required, there shall be one chair or platform located on each side of the pool.
- (4) Portable lifeguard chairs or elevated lifeguard platforms shall be acceptable providing they are structurally sound and tilt proof.
- (5) Lifeguard chairs shall be at least 6' (1.8m) in height from the deck surface to the chair seat or elevated lifeguard platforms shall be at least 34" (85cm) in height from the deck surface to the platform surface.
- (6) Where pool decks are at least 6' (1.8m) in width, all general-use pools built prior to March 1, 1979, shall comply with subsection (2) of this section. All pools shall comply with subsection (5) at such time as new elevated chairs or platforms are installed and/or existing elevated chairs or platforms need replacement, providing existing chairs are a minimum of 4' (1.2m) in height.

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0128; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94

### **Life Saving Equipment 333-60-100**

The following lifesaving equipment shall be provided at all public swimming pools:

- (1) A non-adjustable reach-pole not less than twelve (12) feet (3.6m) in length with an attached life hook.
- (2) One life buoy with an attached thirty (30) foot (9.2m) long line. Such equipment shall be mounted conspicuously within the pool enclosure or the pool room and be readily available to lifeguards and pool users.

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0130; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94

# **Swimming Pool Enclosure 333-060-0105**

- (1) Public swimming pools shall be protected by an enclosure. Such enclosure shall be a fence, wall, or building without private entrances to the pool area.
- (2) Swimming pool enclosures including windows, gates and doors shall be constructed in such a manner so as to discourage access to the pool by unsupervised children and/or domestic animals and shall incorporate the following construction standards:
  - (a) Enclosures shall be not less than 4' (1.2m) in height measured from the outside ground level at a point 1' (30cm) horizontal from the base of the enclosure;
  - (b) There shall be not more than 4" (10cm) of space between the bottom of the enclosure and the ground's surface or pool deck;
  - (c) Separation between vertical sections and bars shall be a maximum of 4" (10cm);
  - (d) Horizontal rails shall be spaced with a minimum 42" (105cm) separation;
  - (e) All exterior projections or recessions shall be 42" (105cm) from either the top or bottom of the fence;
  - (f) Gates and doors in swimming pool enclosures shall be self-closing and shall be equipped with a lockable self latching device. The operating controls for the self-latching device shall be located at least 42" (105cm) above the exterior ground surface or pool deck. Gates and doors on new pools must swing "out" of the pool enclosure, or away from the pool. Existing pools must make the door or gate swing change when there is not an undo economic impact.

- (g) Entrances with self-closing and self-locking devices requiring the use of a key, key card, or combination code to gain access may have controls 36" to 54" (0.9 m to 1.35 m) above the exterior ground surface. The gates or doors cannot require a key, keycard or combination to exit the pool area;
- (h) Construction methods and materials shall be used that provide a durable and low maintenance structure; and
- (i) Buildings enclosing public swimming pools shall be constructed in accordance with the requirements of the Oregon State Structural Specialty Code 2007 Edition, as amended by the Building Codes Agency, adopted April 1, 2007.
- (3) The Division may approve alternate enclosure materials and methods where the Division finds such materials and methods equivalent to those described in section (2) of this rule.
- (4) Swimming pool enclosures constructed prior to March 1, 1979, which are a minimum of 42" (105cm) in height; or with spacing not greater than 5" (13cm) between vertical boards (bars); or with spacing not greater than 5" (13cm) between the bottom of the fence and the pool deck; or with spaces between the horizontal rails not less than 38" (95cm), shall be acceptable until such time as the enclosure requires repair or replacement.
  - (a) Pools without constant supervision in the pool area may provide access through controlled entry points based on one of the following conditions:
    - (A) When only adults over the age of 18 are allowed access to the pool area through a controlled-access point such as a registration or check-in desk, they may have direct access to the pool without passing through closed doors or gates. The pool entry must be able to be locked and secured when the pool is closed.
    - (B) If persons under the age of 18 might have access to the pool area, then the operator must provide a lockable, self-closing door or gate with a self-latching device. The operating controls for the latch must be located 42" to 54" (1.2 m to 1.35 m) above the exterior ground surface; or
  - (b) When a pool is closed to patrons, all entry/exit points are to be properly maintained and secured against unauthorized entry.

**Note:** For outdoor pools, a security-type pool cover may be added as an additional layer of security for the pool, especially during the off season for those pools which maintain water in the pool basin.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005-448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0133; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94; PH 10-2007, f. & cert. ef. 7-13-07

#### Decks 333-060-0110

- (1) The following minimum continuous unobstructed deck widths, which may include the coping, shall be provided at all public pools;
  - (a) General-use swimming pools 8'(2.4m).
  - (b) Limited-use swimming pools, spray pools, wading pools 4'(1.2m).
    - (A) Pools built prior to March 1, 1979, shall have 4' (1.2m) of deck on at least two sides of the pool.
    - (B) Public wading pools and spray pools built prior to July 1, 2006 must have a minimum of 4' (1.2m) of deck around the pool. Wading pools built after July 1, 2006 must comply with the deck requirements of OAR 333-060, 0505(8).
- (2) A minimum of 4'(1.2m) unobstructed deck shall be provided on all sides of diving equipment and slides.
- (3) Decks shall slope no less than 1/4" per foot (6mm per 30cm) and shall be drained to perimeter or area drains.
- (4) Deck surfaces:
  - (a) Shall be constructed of concrete, non-slip tile, or equally impervious material with a slip-resistant, easily cleanable surface impervious to water.
  - (b) Surfaces meeting the requirements of (a) must be maintained for a minimum width of 8' (2.4m) around the perimeter of general-use pools and 4' (1.2m) around the perimeter of limited-use pools or within the limits of the deck drainage area, whichever is greater. Wood decking, carpeting or artificial turf deck surfaces are prohibited within 8' (2.4m) of general-use pools or 4' (1.2m) of limited-use pools or within the limits of the deck drainage area, whichever is greater.
  - (c) Pools previously approved with deck surfaces not complying with (a) shall comply at such time as the surface requires repair or is replaced.
- (5) Joints between concrete deck slabs shall be watertight and shall be designed so as to protect the pool, coping and its mortar bed from movement of the deck.
- (6) Decks shall be provided with expansion joints.
- (7) Voids between adjoining concrete deck slabs shall be no greater than 3/16" (5mm).
- (8) Adjoining deck surface elevations shall vary no more than 1/4" (6mm).
- (9) New and replacement expansion joints shall not be constructed of wood.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0135; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-94, cert. ef. 9-1-94; PH 17-2006, f. 6-30-06, cert. ef. 7-1-06

### **Overflow Systems 333-060-0115**

All public swimming pools shall be operated with a continuous overflow. Overflow systems shall be either of the perimeter type or a series of surface skimmers.

- (1) A perimeter type overflow system shall be used at all general-use public swimming pools and at limited-use public swimming pools which are greater than 30 feet (9.1m) in width or have more than 2,500 square feet of surface area. Such perimeter system shall:
  - (a) Extend completely around the pool;
  - (b) Have a gutter which is smooth, cleanable and provides positive drainage.
- (2) (a) A perimeter type or skimmer type overflow system shall be used at all limited-use public swimming pools less than 30 feet (9.1m) in width or with less than 2,500 square feet of surface area.
  - (b) Where skimmers are used, there shall be one skimmer for each 400 square feet of surface area, with a minimum of two (2) skimmers.
  - (c) Skimmers shall be located so as to achieve effective skimming action over the entire surface area of the pool.
- (3) (a) Perimeter overflow systems shall be connected to the recirculation system with a system surge capacity of at least one gallon per square foot of pool surface. External surge systems shall be capable of transferring water at a rate equal to 100 percent of the design pool flow rate. Gutters shall drain in two minutes or less after sudden flooding.
  - (b) Pools with perimeter overflow systems shall be provided with surge tanks unless pre-designed and prefabricated to use in-gutter or in-pool surge. Surge tanks shall have a capacity of one gallon per square foot of pool surface.
- (4) Overflow systems shall be designed so as to return overflow water to the recirculation system ahead of the filters. Provisions shall be made for diverting gutter water to waste when cleaning the gutter.
- (5) Pools built prior to 1971 which were constructed without the overflow system being connected to the recirculation system shall satisfy this requirement by overflowing at least daily provided the water quality parameters of Pool Water Quality OAR 333-60-200 and Table 3 are met.

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0138; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94

# Recirculation System 333-060-0120

- (1) All public swimming and wading pools shall have recirculation and filtration systems with piping, pumps, filters, disinfection and other equipment to maintain pool water quality as required by these rules.
- (2) The system of pumps, filters, disinfection facilities and other equipment shall be of adequate size to recirculate, filter and disinfect the entire volume of pool water in the following maximum time intervals:

Maximum Turnover	Time
(a) General-use public pools and limited-use public pools of over 2,000 square feet of surface area.	6 hours
(b) Limited-use public pools of less than 2,000 square feet of surface area.	8 hours
(c) Public wading pools.	See OAR 333-060-0505
(d) Limited use pools operated in conjunction with athletic clubs and built after May 1, 1986.	6 hours

- (3) Overflow water shall not be less than 50 percent of the total recirculated water.
- (4) Recirculation and filtration systems shall be in operation continuously while the facility is in use.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0140; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94; PH 17-2006, f. 6-30-06, cert. ef. 7-1-06

#### Inlets 333-060-0125

- (1) Pool inlets must be provided, sized and arranged to produce a uniform circulation of water so as to maintain a uniform disinfectant residual throughout the pool.
- (2) There must be at least one inlet per 400 square feet of pool area or 10,000 gallons of water, whichever is greater.
- (3) Pools more than 50 feet wide and reverse flow pools must use floor inlet fittings uniformly spaced no more than 20 feet apart and within 15 feet of the sidewalls.
- (4) Grates must be designed so as to prevent entrapment of fingers.
- (5) All recirculation inlet fittings must be adjustable for rate of flow. Wall inlet fittings must be directional.
- (6) Inlet fittings must have tamper-proof screws that cannot be removed except with tools. Grates, vortex plates and inlet fittings must be in place whenever the pool is in use.
- (7) Direct potable water pool inlets must:
  - (a) Be over-the-rim fill spouts with air gaps located under a diving board or beside grab rails;

- (b) Be through-the-wall fill lines located above the water level and equipped with an appropriate backflow prevention device installed per OAR 333-061-0071; or
- (c) Be directly connected to the recirculation water supply and equipped with reduced pressure device installed per OAR 333-061-0071 on the potable water supply adjacent to the connection with the pool recirculation water

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0143; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-94, cert. ef. 9-1-94; PH 6-2009(Temp), f. 6-16-09, cert. ef. 6-17-09 thru 12-13-09; Administrative correction 12-23-09

# Submerged Suction Outlets and Drains 333-060-0128

The provisions in this rule are consistent with the requirements of the federal Virginia Graeme Baker Pool and Spa Safety Act (VGBPSSA), 15 USC 8001. Public swimming pools, wading pools and spas that operate year-round were expected to be in compliance by December 19, 2008. Seasonal public pools and spas that were closed when the law went into effect are expected to be in compliance with the federal law on the day that they reopen in 2009. The U.S. Consumer Product Safety Commission (CPSC) is responsible for enforcing the VGBPSSA. Sections (1) and (2) of this rule will not be enforced by the state or a county delegated authority under ORS 448.100 against public swimming pools, wading pools and spas built prior to the effective date of this rule as the state is not responsible for enforcement of the VGBPSSA. However, any public swimming pool, wading pool or spa not in compliance with the VGBPSSA could be subject to an enforcement action by the CPSC.

- (1) Two Outlets. There must be at least two outlets located at the lowest point of the pool floor to drain the entire floor area. Exceptions to this include:
  - (a) Reverse Flow Pools, where the drain is not connected to the recirculation system, but is provided for drainage of the pool through an air-gap connection to the sanitary sewer.
  - (b) Other suction-fitting arrangement that allows the drainage of the pool through an air-gap connection to the sanitary sewer, or other approved location, while also providing entrapment protection.
  - (c) Pools with no drain system, with provisions to completely drain the pool to the sanitary sewer or other approved location, by other means that have entrapment protection.
- (2) MAIN DRAINS AND SUBMERGED SUCTION FITTINGS. All submerged suction fittings must be installed according to the standards below.
  - (a) Pool main drains must be installed in the deepest part of the pool and designed to minimize tripping and toe stubbing hazards. Suction fittings must be installed to minimize tripping, toe stubbing and scrape hazards.

- (b) Main drain and submerged suction outlets must be designed with sufficient open area that the maximum velocity through the cover does not exceed the cover's listed flowrate.
- (c) All hardware and fittings must be supplied by the manufacturer and installed according to the manufacturer's directions.
- (d) Main drain and submerged suction fitting systems must provide ENTRAPMENT, HAIR ENTANGLEMENT and EVISCERATION protection.
  - (A) Main drains and submerged suction fittings and sumps must be compliant with the requirements of ANSI/ASME A112.19.8 (2007). The cover must be labeled and include; "VGB 2008," the logo of the third party listing agency, the standard for which it was tested, the gallons for which it was approved and the location it is to be placed.
  - (B) All submerged suction fittings must be installed with a sump designed and approved by the manufacturer for that outlet cover.
  - (C) All field built sumps must be designed by an Oregon registered engineer and must be built so the opening of the suction pipe is no closer than 1.5 times the pipe's inside diameter from the bottom of the listed suction cover/plate.
  - (D) Main drains and submerged suction fittings must be separated by at least three feet (measured from the main drain connector pipe centerlines) between the furthest fittings, or be on separate planes, placed so the floor and wall suction fittings cannot be easily blocked at the same time.
    - (i) The outlets must be sized to handle an equal portion of at least 200 percent of the recirculation flow.
    - (ii) The outlets must be installed so that they cannot be isolated from one another; no intervening valves.
    - (iii) The piping going back to the pump must be located in the hydraulic middle of the connector piping, and must be the same size as the connector piping.
- (3) BROKEN OR MISSING GRATE FITTINGS. If the pool operator finds that a suction fitting is broken or missing, they must close the pool immediately, shut down the recirculation system and remain closed until the fitting has been replaced.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.:

# Piping 333-060-0130

(1) Pool recirculation piping shall be sized to carry the following maximum design flows:

(a) Discharge piping (except copper) 10ft./sec.(3m/sec.)

(b) Discharge piping (copper) 8ft./sec. (2.4m/sec.)

(c) Suction velocity 6ft./sec. (1.8m)/sec.)

(2) Pool recirculation piping, if plastic, shall comply with National Sanitation Foundation Standard Number 14 for Plastic Materials, Pipe, Fittings and Appurtenances for Potable Water and Waste Water.

- (3) All pool recirculation piping shall be rated and capable of withstanding four (4) times the maximum operating pressure at maximum water temperature.
- (4) Provisions shall be made to de-water all recirculation piping and equipment.
- (5) Pool backwash and/or drain lines shall be permanently piped with an air-break. For all pools built after May 1, 1986, the pool backwash and/or drain lines shall be permanently piped with an air gap to discharge into an approved sewerage system.

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0145; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94

# Pumps 333-060-0135

- (1) A pump and motor shall be provided for recirculation of pool water.
  - (a) All pumps shall be provided with a strainer on the suction side of the pump. The strainer shall be at least equal in size to the pump suction line.
  - (b) Strainers installed below water level shall be provided with a valve on each side to facilitate cleaning.
- (2) Performance of pumps shall meet the conditions of flow required for filtering and backwashing the filters against the total dynamic head (TDH) developed by the complete system. Pumps shall be capable of providing design flow rates at 60 feet of TDH unless the TDH for the system is calculated to be less than 60 feet.
- (3) Pumps shall be capable of pumping at a rate sufficient to turn over the total pool volume within the periods of time specified in Recirculation System OAR 333-60-120 (2).
- (4) Pumps on public swimming pools shall comply with National Sanitation Foundation Standard Number 50 on centrifugal pumps.
- (5) Pumps shall be sized so as to pump the flow required in paragraph (3) of this section under filter soil conditions such as to create pressures or vacuums at which manufacturers recommend filter cleaning.

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0148; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94

#### Filters 333-060-0140

(1) Filters shall be capable of maintaining pool water clarity as described in Pool Water Quality 333-60-200 and Table 3 under conditions of maximum user load.

- (2) Filter rate shall not exceed the following:
  - (a) High rate sand filters 18 gpm per square foot of filter media or that rate approved by the manufacturer for that particular filter, whichever is less. Pools constructed prior to May 1, 1986, may continue to use filters sized at 20 gpm per square foot of filter media until replaced.
  - (b) Rapid sand filters 3 gpm per square foot of filter media.
  - (c) Diatomaceous earth filters 2 gpm per square foot of filter media.
  - (d) Cartridge filters 0.375 gpm per square foot of effective filter area.
- (3) A means shall be provided to permit release of air which enters the filter tank.
- (4) Filter components which require servicing shall be accessible and available for inspection and repair.
- (5) Filters shall be designed so that filtration surfaces can be easily inspected and serviced.
- (6) Filters shall meet the safety performance standards of the National Sanitation Foundation Standard Number 50 depending on the filter media.
- (7) Separation tanks or settling sump are required with DE filters. Separation tanks shall:
  - (a) Be provided with a manual means of air release or a lid which provides a slow and safe release of pressures;
  - (b) Have a precautionary statement affixed warning the user that the air release must be opened before starting the circulation pump.

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0150; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94

#### **Pool Heaters 333-060-0145**

(1) Fired water heaters installed after the effective date of these rules, used exclusively for heating water for swimming pools are considered pool boilers and are exempt from the requirements of ORS 480.510 to 480.665 (Boiler and Pressure Vessel Law) if:

- (a) Units are equipped with a flow switch or pressure switch set at a minimum of 1-1/2 psig;
- (b) No intervening stop valves are installed on the discharge side of the unit;
- (c) Discharge piping is not reduced from the engineering sizing of the fired heater;
- (d) All units are equipped with an ASME-approved pressure and temperature relieving device set at 50 psig;
- (e) The unit has a maximum of 10 gallons capacity contained within the unit; and
- (f) The burner is wired in series with the recirculation pump.
- (2) Where fuel burning swimming pool heaters are provided for public swimming pools, they shall:
  - (a) Be situated so that the pilot light, if present, is readily accessible;
  - (b) Be provided with an adequate supply of combustion air; and
  - (c) Be equipped with metal or chlorinated polyvinyl chloride pipe (CPVC) for a minimum of 18 inches (45cm) upstream and downstream of the heating equipment. However, where manufacturer's recommended installation allows shorter lengths of CPVC, installation according to manufacturer's recommendations is allowed in lieu of 18 inches of CPVC if documentation of manufacturer's recommendations is provided.
- (3) Where electrical heaters are provided, they shall be installed in accordance with the Oregon State Electrical Specialty Code, 1993 Edition adopted July 1, 1993. When required by Underwriters Laboratory, metallic current collectors shall be installed on the inlet and outlet of the heater. The current collectors shall be grounded and shall be at least 5 pipe size diameters in length.

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0153; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94

#### Disinfectant and Chemical Feeders 333-060-0150

- (1) A means of disinfecting the public swimming or wading pool water shall be provided which provides a disinfecting residual in the pool waters at all times as described in Pool Water Quality, OAR 333-60-200 (1)(a) and in addition, public wading pools must also comply with OAR 333-060-0515.
- (2) Automatic disinfection equipment for introducing a disinfectant shall be provided.
- (3) Disinfection equipment shall:
  - (a) Be equipped with suitable controls capable of fine feed rate adjustment;
  - (b) Be capable of feeding one pound of equivalent chlorine per 15,000 gallons of pool capacity per 24 hours.

- (c) Be capable of feeding two and one quarter pounds (2-1/4) of bromine per 15,000 gallons of pool capacity per 24 hours where bromine sanitation is applicable.
- (4) Hypochlorinators, erosion (flow-through) feeders, or other adjustable output rate disinfectant feeding equipment shall conform to National Sanitation Foundation Number 50 for Circulation System Components for Swimming Pools.
- (5) Where chlorine gas is used as the disinfectant:
  - (a) Such chlorine gas, its feeders, and other containers shall be housed in a room or compartment separate from other pool equipment. Such room or compartment shall:
    - (A) Be at or above ground level.
    - (B) Have adequate ventilation to the outside air.
    - (C) Have a door which opens to the outside of the building of which the room or compartment is a part. Doors installed after January 1, 1994 shall have a shatter-proof gas tight inspection window for viewing the enclosed area. Such a door must open away from public access area.
    - (D) Be located so that chlorine gas, if accidentally released, will not flow into the pool room or into the building ventilation systems.
    - (E) Have lighting and ventilation switches located outside the enclosure, adjacent to the door, or the door shall be equipped with a door switch which automatically activates the mechanical ventilation and lighting systems.
  - (b) A platform scale for measuring the weight of the chlorine cylinders shall be provided.
  - (c) A full face negative pressure respirator with a chlorine cartridge approved by the National Institute of Occupational Safety and Health (NIOSH) for protection against chlorine gas or a self-contained breathing apparatus approved by NIOSH shall be supplied, kept in good working condition and mounted outside the chlorine enclosure. (Note: storage of such equipment in rooms adjoining the chlorine room shall be approved provided such equipment is readily available.)
  - (d) Gas chlorinators shall have a fail-safe mechanism which ceases chlorination in case of malfunction.
  - (e) Gas chlorinators shall be equipped with an anti-siphon chlorine injection device.
  - (f) The vent line from the gas chlorinator shall vent away from an occupied area. The exterior opening of the vent line shall be screened.
- (6) Where disinfectants other than chlorine or bromine are used, such disinfectants shall:
  - (a) Achieve water disinfection equal to that which free chlorine or bromine provides at the concentration specified in Pool Water Quality OAR 333-60-200, Table 3, (1)(a); and

- (b) Be approved by the Division.
- (7) Ozone disinfection may be used only under conditional approval by the Division as a supplemental system. Interim guidelines governing the installation and operation of ozone equipment may be requested from the Division.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0155; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94; PH 17-2006, f. 6-30-06, cert. ef. 7-1-06

# **Meters and Gauges 333-060-0155**

(1) Flow meters shall be installed in all recirculation systems. Such meters shall:

- (a) Measure flow in gallons per minute;
- (b) Be mounted as recommended by the manufacturer; and
- (c) Be located so as to be easily read.
- (2) Pressure gauges or vacuum gauges shall be installed on all public swimming pools so that pressure or vacuum readings, as appropriate to filter type, may be obtained on both the influent and effluent lines of the filters.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.011

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0158; HD 7-1986, f. & ef. 5-1-86

# **Equipment Room 333-060-0160**

- (1) Swimming pool and wading pool equipment shall be installed in a room or building large enough to permit ready access to all equipment for both operation and maintenance. Ready access shall be determined by:
  - (a) General-use swimming pools a minimum of 3 feet (90cm) of unobstructed access to all operational and maintenance portions of the equipment.
  - (b) Limited-use swimming pools a minimum of 50 square feet of floor area or a minimum of 3 feet (90cm) of unobstructed access to operational and maintenance portions of the equipment.
- (2) Equipment rooms shall be adequately ventilated.
- (3) Equipment rooms shall protect the equipment from the elements and be locked, permitting access only to authorized personnel.
- (4) Equipment rooms for all pools built after May 1, 1986 shall have a floor drain.
- (5) Equipment rooms shall be lighted to properly operate and maintain equipment.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0160; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94; PH 17-2006, f. 6-30-06, cert. ef. 7-1-06

# **Ground Fault Interrupter 333-060-0165**

A certified ground-fault circuit-interrupter shall be provided on all branch circuits involved in lighting or receptacle outlets according to Article 680 of the Oregon State Electrical Specialty Code, 1993 Edition, adopted July 1, 1993.

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0163; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94

# **Bathhouses and Sanitary Facilities 333-060-0170**

(1) A bathhouse shall be provided at all general-use swimming pools.

- (2) Where a general-use swimming pool is operated in conjunction with a companion facility, a bathhouse common to both facilities shall be acceptable, provided the minimum facility ratios and locations described in paragraphs (3), (4), and (5) of this section are followed.
- (3) Bathhouses shall:
  - (a) Meet requirements of:
    - (A) The Oregon State Structural Specialty Code, 2007 Edition;
    - (B) The Oregon State Mechanical Specialty Code, 2007 Edition;
    - (C) The Oregon State Electrical Specialty Code, 2005 Edition;
    - (D) The Oregon State Plumbing Specialty Code, 2005 Edition;
  - (b) Be located within 200 feet (61m) of the general-use swimming pool;
  - (c) Have floors which are slip resistant, easily cleanable, and coved to a height of four inches (10cm).
  - (d) Have shower compartments with walls which are impervious to water to a height of six (6) feet (1.8m) above the floor. An effective water-tight joint between the wall and the floor shall be maintained. (Wooden racks or duck boards over shower floors are prohibited.)
  - (e) Have interior wall and ceiling finishes which are smooth, easily cleanable, and impervious to water.
  - (f) Where rubber or impervious mats are used, have such mats clean and dry between usages.
  - (g) Have shower stall floors that are finished with non-slip, impervious surfaces.
  - (h) Where glass bath or glass shower doors are used, have such doors made of safety glass.

- (i) Have a first-aid room equipped with a minimum of one cot, one blanket and supplies as described in Appendix A.
- (j) Hose bibs shall be provided for washing down the bathhouse interior; and
- (k) Floors shall slope a minimum of 1/4 inch per foot (6mm/30cm) and shall drain to floor drains.
- (4) General-use swimming pools shall provide sanitary facilities in the following numbers based upon maximum user load:
  - (a) Toilets Women, one per 40 pool users or fraction thereof, with a minimum of two; Men, one per 60 pool users or fraction thereof, with a minimum of two (urinals shall be an acceptable substitute for no more than 1/2 of the toilets).

**Exception**: Pools built prior to June 5, 1956, may have a minimum of one (1) toilet. If the bathhouse is remodeled, it shall comply with the current standards.

- (b) Lavatories adjacent to toilets one per 60 pool users or fraction thereof.
- (c) Showers one head per 40 pool users or fraction thereof, with a minimum of two.
- (5) Showers shall be located so as to provide users immediate access to the pool deck.
- (6) Limited-use swimming pools shall provide sanitary facilities based on the maximum bather load of OAR 333-60-055 in the following numbers:
  - (a) Provide toilets and lavatories as described in (4)(a) and (4)(b) of this section; and
  - (b) Provide such toilets and lavatories within 1,000 feet (305m) of the swimming pool.
  - (c) Private accommodations located within 1,000 feet (305m) of the swimming pool shall constitute compliance with the requirements of subsection (6)(a) of this section. When provided, additional bathhouse facilities adjacent to the pool shall comply with subsection (3)(a), (3)(c), (3)(d), (3)(e), (3)(f), (3)(g) and (3)(h) of this section, and are exempt from the fixture requirements of subsection (4) of this section.
- (7) Hot and cold or tempered water only shall be provided at all shower heads.
- (8) Soap shall be provided at all shower heads and lavatories.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005-448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0165; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-94, cert. ef. 9-1-94; PH 10-2007, f. & cert. ef. 7-13-07

# Visitor and Spectator Areas 333-060-0175

Visitors and spectators shall be allowed within the pool room or pool enclosure only if they are restricted to a separate area not used by bathers. At general-use public pools, separate toilets shall be provided for spectators.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.011

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0168; HD 7-1986, f. & ef. 5-1-86

### Food Service 333-060-0180

No food or drink shall be permitted within the 4' (1.2m) minimum deck area of limited-use pools or within the 8' (2.4m) minimum deck area of general-use pools. Glass containers are not permitted within the pool enclosure. Food and drink shall be permitted in the visitor and spectator areas or in separated snack areas for pool users. Trash containers shall be provided in the food service areas.

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0170; HD 22-1994, f. 8-22-94, cert. ef. 9-1-94

# **Drinking Fountains 333-060-0185**

Drinking fountains shall be provided at all general-use public pools.

Stat. Auth.: ORS 448.011 Stats. Implemented: ORS 448.011

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0173

# Domestic Water Quality 333-060-0190

- (1) Water supplied at public swimming pools shall comply with the rules of the Division for Public Water Systems, OAR 333-61-005 through 333-61-099.
- (2) There shall be no cross connection between the pool water recirculation system or backwash system and the domestic water supply. Public swimming pool water recirculation and backwash systems shall comply with the Cross Connection Control Requirements of OAR 333-61-070.

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0175; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94

# Pool Water Quality 333-060-0200

- (1) Water in public swimming pools and wading pools shall be maintained with water quality parameters within the set limits set out in Pool Water Quality OAR 333-60-200 and Table 3.
- (2) Testing Equipment:
  - (a) All public swimming pools shall have functional test kit(s) or equipment for measuring the pH, free and combined chlorine concentration, or bromine, (or concentration of other approved disinfectant), total alkalinity, turbidity (water clarity) and cyanuric acid if stabilized chlorine is used.

- (b) Functional test kits or testing systems to test for total copper and silver concentrations shall be provided when they are used as supplemental disinfectants.
- (c) Test kits for measuring free chlorine or bromine shall use DPD as the reagent.
- (3) Pool operators shall test and record the parameters described in paragraph (2)(a) and (2)(b) of this section with the following minimum frequencies during periods when the pool is open for use:
  - (a) pH daily
  - (b) Chlorine
    - (A) Outdoor Pools:

Chlorine (Non-stabilized) - hourly

Chlorine (Stabilized with a minimum of 30 ppm cyanuric acid) - every 4 hours

- (B) Indoor Pools: Chlorine every 4 hours
- (c) Bromine
  - (A) Outdoor Pools: Bromine hourly
  - (B) Indoor Pools: Bromine every 4 hours
- (d) Continuous reading devices shall satisfy requirements (3)(a) and (b), and (c) if such devices record in pH units and ppm of free chlorine or bromine.
- (e) Total copper weekly, if used
- (f) Total silver
  - (A) If ionizing technology is used, once per quarter for one year after equipment is installed; twice per year thereafter.
  - (B) Weekly if silver is dispensed without using ionizing technology.
- (g) Total alkalinity weekly
- (h) Calcium hardness (recommended) weekly
- (i) Turbidity daily
- (j) Cyanuric acid (if used) monthly.
- (4) Notwithstanding the above, the Division may require any other testing frequency for a pool water parameter or a chemical added to the pool for the purpose of protecting public health.

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0178; HD 7-1986, f. & ef. 5-1-86; HD 17-1991, f. & cert. ef. 10-15-91; HD 22-1994, f. 8-22-94, cert. ef. 9-1-94

# Operation and Maintenance 333-060-0205

- (1) Operators of public swimming pools shall be thoroughly knowledgeable on good practices of pool operation and with the laws and rules pertaining to public pools. If, at any time, testing indicates that the pool water does not conform with the requirements for clarity, minimum residual free chlorine or bromine, or the pH exceeds 7.8 the pool operator shall immediately close the pool to the public until the requirements are satisfied.
- (2) (a) Operators of public pools shall keep records pertaining to the operation and maintenance of the pool which they operate.
  - (b) Such records shall be maintained daily during periods when the pool is open, shall be retained by the operator and made available to the Division on request. All such records shall be retained for a period of two years.
  - (c) Records shall include at least the following:
    - (A) Results of the tests described in Pool Water Quality 333-60-200(3) and Table 3.
    - (B) Date and time of filter backwash.
    - (C) Dates that the pool was emptied and/or cleaned.
    - (D) Periods of recirculation equipment operation and/or malfunction and repair.
  - (d) A recommended record keeping form is provided in Appendix B.
- (3) (a) All parts and facilities of public swimming pools and bathhouses shall be kept clean, in good repair and free of safety hazards.
  - (b) All public swimming pools shall provide a vacuum cleaner capable of effectively removing settled material from the bottom of the pool.
- (4) Upon request by the Administrator or an authorized representative, the operator shall provide access to all portions of the public swimming pool facility during normal times of operation.

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0180; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94

# **Supervision – Limited-Use Pools 333-060-0206**

(1) RESPONSIBLE SUPERVISOR. A responsible supervisor or certified operator must be accessible any time the pool is open to bathers. This person or persons, are delegated and accountable for the supervision of the pool, but may not need to be in the pool area at all times. The owner, operator, or certified operator delegates the responsibilities.

- (2) A responsible individual appointed by the owner or responsible supervisor must maintain surveillance over the pool during all hours of operation. Such surveillance shall be no less frequent than the frequency of manual pool water testing required in OAR 333-060-0200(3) (Pool Water Quality).
- (3) LIFEGUARDS. Lifeguards are not required at most limited-use pools. If they are provided they must meet requirements of OAR 333-060-0208. Lifeguards must be provided at:
  - (a) Pools with waterslide flumes more than six feet in height.
  - (b) Pools with drop slides more than six feet in height or that drop into the water from a height of more than six inches above the water.
  - (c) Pools that have water features, water play equipment, or have a design that is determined by the Division to need supervision during use. Such pools might include, but are not limited to, pools with slides or waterslides, pools with equipment such as rope swings, lily pad walks, zip lines, and other interactive equipment, and pools with features such as current rivers, vortexes, and other uses of rapidly moving water.
  - (d) Pools that are required to provide lifeguards must meet the staffing requirements of OAR 333-060-0207(2).

Stats. Implemented: ORS 448.005-448.100, 448.990

Hist.: PH 10-2007, f. & cert. ef. 7-13-07

# **Supervision – General-Use Pools 333-060-0207**

- (1) Certified Operator. By January 1, 2009, all public swimming pools serving or installed for the state or any political subdivision of the state, including a school district, municipality, or recreation district with 2000 square feet (185 m<sub>2</sub>) or more pool surface area in one or more pools must have at least one currently Certified Pool Operator, on staff, as defined in OAR 333-060-0015(6). This person must be in a position with management responsibility for the way the pool is operated, including the authority to close the pool.
- (2) Lifeguards. Lifeguards must be provided at all general-use pools during all hours of operation. The number of lifeguards is determined by the type of pool.
  - (a) One lifeguard for every 40 patrons in the pool, or fraction thereof, shall be provided.
  - (b) Lifeguarding Plan. Any pool operator may submit a lifeguarding plan as an alternative to compliance with section (2)(a) of this rule. The 10/20 guest protection standard, or equivalent, provides a method for evaluating and developing a lifeguard staffing plan providing rapid emergency response.

- (A) All general-use specialty pools and water recreation attraction pools and limited-use pools required to have lifeguards are required to submit a lifeguarding plan to the Division or its agent for approval. Unless otherwise determined by the Division or its agent, the number of lifeguards determined by the lifeguard plan shall be provided, with the additional guards required in sections (2)(c) and (2)(d) of this rule.
- (B) A shallow water lifeguard as defined by OAR 333-066-0015(31) may substitute for the required lifeguard at pools less than four feet (1.2 m) deep and at wading pools. At no time may they substitute for lifeguards at pools with water depths greater than four feet.
- (C) A lifeguard near the exit to slides or waterslide flumes shall be provided. A lifeguard may guard two slides or waterslide flumes, situated near each other so they are both easily supervised.
- (D) An attendant, responsible for enforcing slide usage rules at the entrance to slides or waterslide flumes shall be provided. One attendant may supervise two slides located near each other, on the same tower.
- (E) Slides less than six feet high, discharging six inches or less above the water, with open slide trays or flumes so the landing area is easily visible, may be exempted by the Division from some or all of the dedicated supervision requirements in sections (2)(C) and (2)(D) of this rule.

Stats. Implemented: ORS 448.005-448.100, 448.990

Hist.: PH 10-2007, f. & cert. ef. 7-13-07

# Lifeguard Supervision & Training 333-060-0208

- (1) TRAINING. A qualified lifeguard must be currently certificated in lifeguarding, first-aid and CPR as defined in OAR 333-060-0015(13), as well as having regular in-service training and training as required by OAR 333-060-0208(4) and 333-060-0209.
- (2) DUTIES. When on duty, a lifeguard shall scan and supervise the pool with no other distracting activities such as cleaning, water testing, or minimal unnecessary conversing with patrons.
  - (a) Rotation. Lifeguards must change duty stations at least hourly. The intent of this requirement is to maintain vigilance, if one guard is on duty a major shift in position or activity is required and suggested much more frequently than hourly. (e.g. changing sides of the pool, walking instead of sitting, etc.)
  - (b) Breaks. Lifeguards are to be allowed breaks in accordance with Oregon Bureau of Labor and Industry standards. More frequent breaks are recommended when the weather is very hot, extremely sunny, or the patron loading is very high.

- (c) Lifeguards may teach lessons or coach swim teams during times when that is the only activity they are responsible for supervising.
- (d) Lifeguard Orientation. New lifeguards must be provided an orientation to the pool which should include guarding expectations, emergency procedures, communication procedures, and other facility specific information needed to perform the job.
- (e) In-service. Lifeguards are to be provided with in-service training arranged or conducted by the pool operator at least annually to review and practice skills and procedures.
- (f) Performance Evaluation. At the time of hire and at least once yearly, each lifeguard's on deck, on duty performance must be evaluated. The certified pool supervisor, responsible supervisor, or other designated management personnel may conduct the evaluation, and provide documentation of the lifeguard's performance. Performance evaluation deficiencies should be used to organize in-service training.

Note: Lifeguards who cannot demonstrate proficiency in their lifeguarding skills may be a danger to the bathers and to themselves. Serious deficiencies that are not immediately corrected may cause the serious injury or death of a bather, the lifeguard, or other staff member.

- (3) IDENTIFICATION. Lifeguards are to be readily identifiable when on duty.
- (4) SOLAR PROTECTION. Lifeguards and staff at outdoor facilities must be informed of the risks of solar exposure. To avoid excessive employee exposure to solar radiation, the operator must require proper solar protection through the use of appropriate swimsuits, clothing and hats designed to cover the body, sunglasses with ultra-violet radiation protection, lotions with high Sun Protection Factor (SPF) ratings, umbrellas, and other means of protection.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005-448.100, 448.990

Hist.: PH 10-2007, f. & cert. ef. 7-13-07

# Pool Staff Training & Safety 333-060-0209

(1) Bloodborne Pathogens. The pool operator must provide the training, equipment, medical services, and written procedures and protocols needed to protect the pool staff against bloodborne pathogens. Lifeguards would be expected to have the potential to come into accidental contact with bodily fluids during their regular duties.

# Note: OSHA requires compliance with 29 CFR 1910.1030, Bloodborne Pathogen Standard.

(2) Automatic External Defibrillators (AEDs). When an operator provides AED equipment at the pool, they must train the staff on the use and operation of the equipment including periodic training drills to assure continued staff competency.

(3) Oxygen Equipment. When an operator provides oxygen equipment at the pool, they must train the staff on the use and operation of the equipment including periodic training drills to assure continued staff competency.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005-448.100, 448.990

Hist.: PH 10-2007, f. & cert. ef. 7-13-07; PH 10-2007, f. & cert. ef. 7-13-07

#### Pool Safety 333-060-0210

- (1) GENERAL. Any object or material not specifically approved under OAR chapter 333, division 060, which might cause hazardous conditions or interfere with the efficient operation of pool is not permitted in the pool area.
- (2) TELEPHONE. The operator must provide a telephone that is accessible during all hours the pool is open for operation. The phone must be capable of reaching emergency assistance without the use of cards or coins. The operator must conspicuously post, within the pool area, the address of the pool facility.
- (3) LIFESAVING EQUIPMENT. The operator and staff must keep the lifesaving equipment in good repair and in ready condition. Mount the lifesaving equipment in a conspicuous place where it is readily accessible and used only for its intended purpose.
  - (a) Life Hook. The operator must provide a life hook in the pool area. Spa pools and wading pools do not need life hooks. The life hook has a crook design and is securely attached to a non-telescoping pole between eight and 16 feet long. Size the pole so that the life hook is usable in the intended pool, while being as long as possible.
  - (b) Life Buoy. If the pool is over 25 feet (7.6 m) wide a US Coast Guard approved ring buoy or rescue bouy must be provided by the operator. Attach a ¼ in. (15 mm) rope, 30 feet (9 m) long, with a float or knot tied in the end to step on when tossing the device. Pools providing lifeguards during all hours of operation do not need to supply a life buoy.
  - (c) Rescue Tube. The operator must provide each lifeguard on guard duty a rescue tube. The tube is a closed-cell foam tube with an attached towline and shoulder strap. The lifeguard certifying agency will have more complete specifications for the tubes and their use. The tubes must be worn and used properly by the guards.
  - (d) First Aid Supplies. All general-use public pools must have a first aid kit, supplied with at least the items in Appendix A. The kit must be stored in an area close to the pool, where it is accessible for use. The operator must keep the kit supplied and not allow it to deteriorate.
  - (e) Bloodborne Pathogen Cleanup Kit. A bodily fluid cleanup and disinfection kit must be maintained and completely supplied at each general-use public pool facility. The minimum contents of the kit include:
    - (A) A storage and collection bucket with cover;

- (B) Plastic gloves:
- (C) A face mask;
- (D) Disposable towels, disposable sponges or other absorbent material;
- (E) Chlorine disinfectant in a watertight package; and
- (F) A properly identified biohazard disposal bag.

# NOTE: OSHA may require other facilities to also provide bloodborne cleanup kits.

- (f) Water Rescue Spineboards or Backboards. The operator of every pool providing lifeguards must also provide a long spineboard or backboard. The board must be appropriate for water rescue and meet the lifeguard training agency's specifications or equivalent. If a pool has obtained a letter from the local emergency medical services provider stating that the emergency response team would prefer the pool not have a spineboard for stabilization purposes, a spineboard need not be provided.
- (g) Automatic External Defibrillators (AED). All general-use pools, and pools at health clubs serving 100 patrons or more a day, must provide an AED on-site and accessible for use.
  - (A) General-use pools have until January 1, 2009 to comply with section (3)(b) of this rule. Health Clubs serving 100 patrons or more were required by the legislature to provide AEDs by July 1, 2006.
  - (B) The AED must be maintained, inspected and serviced, including the battery and electrodes according to the guidelines set forth by the manufacturer.
  - (C) There must be a sufficient number of employees, including all lifeguards, trained in the use of the AED so that there is one on-site whenever the pool is open.
  - (D) The AED must be stored in a location from which the AED is accessible and can be quickly retrieved.
  - (E) Signage must be provided that indicates the location of the AED.
  - (F) A policy must be developed for the use of the AED, including the need to contact 911 as soon as possible after identifying the incident. This policy should be made available to pool staff and must be posted with the AED.
- (4) EMERGENCY PLANS. Every general-use public pool must develop emergency plans including but not limited to:
  - (a) Injuries, swimmers in trouble, drownings;
  - (b) Equipment breakdowns;
  - (c) Chemical release;
  - (d) Severe Weather;

- (e) Fire; and
- (f) Threats to personnel, patrons, or the facility.
- (5) LIFELINES. The lifeline separating the shallow and deep areas must be kept in good repair.
  - (a) Keep the lifeline in place at all times, except during an event or activity when the lifeline becomes an obstruction.
  - (b) Separation Areas. Keep lifelines separating slide and waterslide plunge areas from the rest of the pool in place at all times the slide or waterslide is in use.
- (6) STARTING BLOCKS AND COMPETITIVE USE. Starting blocks may be used for diving only during supervised competition swimming, training, or instruction. When not in use remove or make the blocks inaccessible. Starting blocks for new or renovated pools must be installed in areas with at least five feet (1525 mm) of water depth. Existing blocks may be used according to the following conditions:
  - (a) Water less than three feet six inches (1070 mm): Swimmers start in the water.
  - (b) Water three feet six inches (1070 mm) but less than four feet (1220 mm) deep: Swimmers start from the deck or in the water, diving blocks are not allowed; For diving entries from the deck, the deck may be no more than six inches (150 mm) above the water surface.
  - (c) Water four feet (1220 mm) but less than five feet (1525 mm) deep: Diving entries may be from elevations up to 18 inches (450 mm) above the water surface;
  - (d) Water five feet or greater in depth: Diving entries may be made from up to 30 inches (750 mm) above the water surface.
- (7) SECURITY. The operator must check and maintain all gates, doors, and windows into the pool area to assure proper operation in compliance with OAR 333-060-0105. Lock and secure the pool area when it is not open for use. Patrons may not have access to the pool when it is not open for use.
  - (a) Fire Exiting. Fire exiting from other parts of a facility through the pool is not allowed. Fire exiting may be provided through the pool area only for the pool dressing /toilet /shower facilities, pool program areas and pool equipment and storage areas as necessary.
    - (A) The pool operator must equip designated fire exit doors and gates with panic hardware In compliance with the Oregon Uniform Fire Code (2007). Design and install panic hardware to protect against access to the hardware from outside the pool area.
    - (B) Existing non-compliant pools must notify and consult with the Division or agent about non-compliant fire-exit pathways through the pool area. Each situation will be reviewed by the Division or agent, in consultation with the local fire protection agency.

- (b) Maintenance Access. Keep doors or gates used for maintenance access to the pool area, or to mechanical, chemical feed and storage areas locked except when access is needed by authorized personnel.
- (c) For pools with lifeguards on duty, access directly to the pool through controlled and supervised access points may be allowed, provided that the pool entry can be secured and locked when lifeguards are not on duty.
- (8) INCIDENT REPORTING. If there is a fatality or an injury, requiring medical follow-up either by a personal doctor or an emergency room, it must be reported by the pool operator to the Division within 72 hours of the incident. The operator should use the form provided by the Division.

#### Note: An accident report form is provided in Appendix C.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005-448.110, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0215; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94; PH 10-2007, f. & cert. ef. 7-13-07

#### Signs 333-060-0215

POOL RULES AND SIGNS. The operator is responsible for posting and enforcing the pool rules governing safety and sanitation. Pools with existing pool rule signs may wait to comply with the requirements of this rule until the signs are replaced, repaired or moved.

- (1) Location and Size. Post the rules in a conspicuous place near the entrance to the pool area and the dressing room. The minimum size for the sign is 18 inches (450 mm) by 24 inches (600 mm) with lettering that is easily legible and at least 1/2 inch (12.5 mm)(36 point type) high.
- (2) Content Pools. At all pools the operator must post and enforce a sign that includes the language in this rule or equivalent language:
  - (a) At pools where lifeguards are not provided:
    - (A) "NO LIFEGUARD ON DUTY" (In letters at least 4 inches high.)
    - (B) "BRING A FRIEND Do not swim alone."
    - (C) "CHILDREN UNDER 14 BRING AN ADULT. Non-swimmers and children under 14 years of age need responsible adult supervision."
  - (b) At all pools:
    - (A) "PROTECT OUR WATER Please do not use the pool if you have had diarrhea in the past two weeks, or a disease communicable by water."
    - (B) "SHOWER YOUR CHILD AND YOURSELF. Take a cleansing shower before entering the pool or after using the toilet."
    - (C) "Swimmers who are not toilet trained must wear a swim diaper."

- (D) "Immuno-compromised individuals should use caution when using a public pool."
- (E) "WATER AND ALCOHOL DON'T MIX. No person under the influence of alcohol may use the pool."
- (F) "NO RUNNING or ROUGH PLAY."
- (G) "NO GLASS OR PLASTIC THAT WILL SHATTER."
- (H) "NO FOOD or DRINK in the pool."
- (I) "NO DIVING ALLOWED", or "NO DIVING, except in designated diving areas."
- (J) "NO ANIMALS in the pool area."
- (c) Contents Slides. The operator must post and enforce, at all slides, except children's activity slides, a sign with the language below or equivalent language:
  - (A) "CAUTION One rider at a time. Wait until the landing area is clear before entering the slide."
  - (B) "Slide feet first in the sitting position or on the back only."
  - (C) "Do not attempt to stop in the slide."
  - (D) "Leave the plunge area immediately."
  - (E) "WARNING: Water depth is "\_\_" feet."
  - (F) "Non-swimmers not permitted." (If the water is over five feet (1.5 m) deep.)
  - (G) "WATER AND ALCOHOL DON'T MIX. No person under the influence of alcohol may use the pool."
- (3) With the approval of the Division, the requirements in section (3) of this rule may be eliminated, modified or added to in connection with water recreation attraction pools, and special-use pools defined in this rule

Stats. Implemented: ORS 448.005-448.100, 448.990

Hist.: HD 2-1979, f. 1-25-79, ef. 3-1-79; Renumbered from 333-042-0215; HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-

94, cert. ef. 9-1-94; PH 10-2007, f. & cert. ef. 7-13-07

#### Variance 333-060-0220

- (1) The Division may grant a variance from requirements of OAR 333-60-005 to 333-60-515 as follows:
  - (a) Where it is demonstrated to the satisfaction of the Division that strict compliance with the rule would be highly burdensome or impractical due to special conditions or cause;
  - (b) Where the public or private interest in the granting of the variance is found by the

Division to clearly outweigh the interest of the application of uniform rules; and

- (c) Where such alternative measures are provided which in the opinion of the Division will provide adequate public health and safety protection.
- (2) Such variance authority is not conferred upon any county notwithstanding delegated or contractual authority in administration and enforcement of the swimming pool statutes and rules.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: HD 8-1980(Temp), f. & ef. 6-26-80; HD 13-1980, f. & ef. 12-19-80; Renumbered from 333-042-0190; PH 17-2006, f. 6-

30-06, cert. ef. 7-1-06

#### **Instructional Use of Limited-Use Pools 333-060-0225**

- (1) The Division recognizes the public's need for instruction in pools which are designed to meet minimum public health and safety criteria. Therefore, the Division will allow the use of licensed limited-use public pools for instruction to the general public provided:
  - (a) Use by the public is limited to instruction only.
  - (b) The instructor meets the qualifications listed in Definitions OAR 333-60-015 paragraph (12).
  - (c) The licensing authority is notified in advance of the time and place of the lessons.
  - (d) Pool water chemistry parameters shall be tested and recorded before and after each scheduled swimming session.
  - (e) Spectators shall not be allowed on the decks.
  - (f) First-aid supplies as described in Appendix A, shall be provided.
  - (g) Sanitary facilities as required by OAR 333-60-170 (4)(a), (b) and (c) must be available to bathers and a cleansing shower required prior to entering the pool.

Stat. Auth.: ORS 448.011 Stats. Implemented:

Hist.: HD 7-1986, f. & ef. 5-1-86; HD 22-1994, f. 8-22-94, cert. ef. 9-1-94

# **333-060-0500** Wading Pools

GENERAL. Public wading pools require special consideration in their design, due to the small water volume and shallow water depth, to protect the health, safety and welfare of the users because of their age, needs and abilities. Although public wading pools may differ very little in design from non-regulated fountains; public wading pools are designed to allow and encourage human interactive water usage, while non-regulated fountains are designed solely for visual appreciation.

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: PH 17-2006, f. 6-30-06, cert. ef. 7-1-06

#### 333-060-0505 New Wading Pool Construction

- (1) RECIRCULATION. All public wading pools that have submerged outlets must have at least two outlets for each pump. Each public wading pool, except those in subsection (1)(c) of this rule, must have a recirculation rate that meets or exceeds subsection (1)(a) or (1)(b) of this rule, whichever is greater:
  - (a) A 60-minute turnover time; or
  - (b) When skimmers are used, each skimmer must be designed to skim between 30 to 45 gpm water flow, when 70 percent of the recirculation flow is through the skimmers ((# of skimmers) x (30 to 45 gpm design flow)/0.70 = gpm recirculation rate). The skimmer piping must be designed to handle 100 percent of the recirculation rate.
  - (c) Spray pools, water playgrounds and interactive fountains that do not pond water and that use potable water once and dispose of it without recirculating it are not regulated or licensed by the Division.
- (2) SEPARATE SYSTEM. Each public wading pool must have its own separate recirculation system.
- (3) SURFACE SKIMMING. The pool must be designed to skim the water surface continuously. The Division may consider overflow structures such as intermittent fixed weir overflow and trench drains, if shown to be comparably compliant to gutter systems. The Division or its agent may consider alternate overflow designs if the designer shows that adequate skimming and water mixing occur when non-traditional designs are proposed.
  - (a) SKIMMERS must be listed as meeting ANSI/NSF Standard 50 requirements by a nationally recognized testing organization approved by the Division. A skimmer must be provided for every 400 square feet (37 m2) of water surface area or fraction thereof and provide flow in the amount determined in subsection (1)(b) of this rule.
  - (b) GUTTERS AND TRENCH DRAINS. Gutters allow skimming along the entire edge of the gutter. Generally the gutter extends completely around the perimeter of the pool. A TRENCH DRAIN is used much like a gutter, and is installed in zero-depth areas where an overflow lip cannot be provided. Trench drains are installed at the same angle as the floor. To skim properly, the bottom edge of the trench drains must be level to a very small tolerance and slightly below the water surface.
    - (A) To determine the minimum amount of surge capacity needed for the pool, add subparagraphs (3)(b)(A)(i) and (ii) of this rule and provide this capacity by installing a surge tank, or any combination of surge tank, gutter, or trench drain:

- (i) Provide a minimum surge capacity equal to an amount determined by calculating eight minutes of recirculation flow (8 x recirculation rate = surge capacity); then
- (ii) Add the surge needs of any spray feature or water activity system. Allow an amount equal to at least two minutes of feature recirculation flow, or as recommended by the manufacturer, whichever is greater.
- (B) Install an automatic fill device, to maintain the water level, on all wading pools with gutters or trench drains.
- (4) INLETS. Locate the inlets to evenly distribute treated water to all parts of the wading pool and to move debris to the overflow and drain systems. The designer is responsible for demonstrating that the inlet system will provide adequate circulation to all portions of the wading pool:
  - (a) Use floor inlets on all wading pools more than 30 feet wide (9.1m), and on zero-depth pools.
  - (b) In-floor cleaning systems, or other products that may cause a tripping or stubbing hazard, are not allowed.
  - (c) All inlet fittings must have tamper-proof screws or attachments that cannot be removed except with tools. Inlet fittings will be in place whenever the pool is in use.
- (5) SUBMERGED SUCTION FITTINGS AND MAIN DRAINS. All submerged suction fittings must be installed according to the standards below.
  - (a) Wading pool main drains must be installed in the deepest part of the pool and be designed to minimize tripping and toe stubbing hazards.
  - (b) Main drain and submerged suction outlets must be designed with sufficient open area that the maximum velocity through the cover does not exceed the cover's listed flowrate.
  - (c) All hardware and fittings must be supplied by the manufacturer and installed according to the manufacturer's directions.
  - (d) Main drain and submerged suction fitting systems must provide ENTRAPMENT, HAIR ENTANGLEMENT and EVISCERATION protection.
    - (A) Main drains and submerged suction fittings and sumps must be compliant with the requirements of ANSI/ASME A112.19.8 (2007). The cover must be labeled and include; "VGB 2008," the logo of the third party listing agency, the standard for which it was tested, the gallons for which it was approved and the location it is to be placed.
    - (B) Maintain any documentation about your main drain or suction fitting.
    - (C) All submerged suction fittings must be installed with a sump designed and approved by the manufacturer for that outlet cover.

- (D) All field built sumps must be designed by an Oregon registered engineer and must be built so the opening of the suction pipe is no closer than 1.5 times the pipe's inside diameter from the bottom of the listed suction cover/plate.
- (E) Two or more outlets must be provided. They must be separated by at least three feet (measured from the midpoint of the main drain connector pipe centerlines) between the furthest fittings, or be on separate planes, placed such that they cannot be blocked by one person.
  - (i) The outlets must be sized to handle an equal portion of at least 200 percent of the recirculation flow.
  - (ii) The outlets must be installed so that they cannot be isolated from one another; no intervening valves.
  - (iii) The main drain or submerged suction fitting-piping going back to the pump must be located in the hydraulic middle of the fitting connector piping, and must be the same size as the connector piping.
- (6) BROKEN OR MISSING GRATE FITTINGS. If the pool operator finds that a suction fitting is broken or missing, they must close the wading pool immediately, shut down the recirculation system and remain closed until the fitting has been replaced.
- (7) BASIN DESIGN. The slope of the pool bottom can be no more than 1 in 12. Eight inches (200 mm) is the maximum water depth allowed at any edge of the pool accessible from the deck. When perimeter water depths exceed eight inches (200mm) at the edge of the pool, stairs and handrails complying with the requirements of OAR 333-060-0080(1), (3), (4)(b), (7), (8), and (9), must be provided at the designated entry points.
- (8) DECKING. Unobstructed decking, five feet (1.5 m) or more in width must be provided around the wading pool perimeter. When a wading pool is adjacent to a swimming pool, it must be located near the shallow end of the swimming pool, with a minimum of nine feet (2.7 m) of deck between the pools.
- (9) ENCLOSURE. Enclose the wading pool area, as required by OAR 333-060-0105. Spray pools, water playgrounds, and fountains that do not pond water may comply with paragraph (11)(c)(E) of this rule in lieu of providing an enclosure.

#### (10) DEPTH MARKING:

- (a) The operator must indicate the maximum pool depth in feet and inches, with a sign near each entrance to the wading pool.
- (b) Depth markings must be placed around the pool perimeter indicating the water depth at the edge, following the requirements in OAR 333-060-0065.
- (c) Pools with a zero-depth edge are not required to have perimeter depth markings, but are still required to provide the maximum depth signs.
- (d) Pools and fountains that do not pond water are not required to have depth markings or maximum depth signs.

- (11) SPRAY FEATURES AND PLAY EQUIPMENT. Fountains, sprays, slides and similar features may be installed, if specifically designed for aquatic installation:
  - (a) WATER SOURCE. Water-using features must be designed and installed to draw their water supply from the main drain or similar fitting, surge tank, trench drains or gutters, but not from the skimmers. The main drain fittings and the related piping must be sized for 100 percent of the pool recirculation rate plus 100 percent of the capacity of any feature pump routed through the fittings. The sizing of the feature pump must be based on 20 ft. TDH (59,000 Pa), unless the actual TDH is calculated.
  - (b) EQUIPMENT DESIGN AND INSTALLATION. Play equipment shall be designed and installed to meet all applicable standards of the CPSC Handbook for Playground Safety (1997 edition), and ASTM F1487, Standard for Public Playground Equipment:
    - (A) Applicable requirements include equipment design and construction, proper anchoring, entrapment protection, protrusion safety, and safety use-zone sizing. All equipment shall be designed for use in pools.
    - (B) Play equipment must be designed to be difficult to climb, unless the equipment is specifically designed for climbing and provided with safety zones and impact attenuating surfaces acceptable to the Division.
    - (C) Swings are not allowed.
    - (D) Obstructions extending from the walls or the bottom of the wading pool are not permitted, unless a designed part of the play equipment, with provisions made for safety and good water circulation.
    - (E) "Children's Activity Slides" are small, low exit velocity slides designed for use by small children in shallow water. They must be designated by the manufacturer for use in 24 inches (0.6 m) or less of water, and installed as recommended by the manufacturer. Other types of slides are not allowed.
    - (F) Spray pools, using potable water, must comply with all requirements concerning basin design, materials, entrapment protection, fall protection, and safety during construction of the pool, and must be maintained and operated in a safe and healthy manner.
  - (c) SPRAY POOLS or WATER PLAYGROUNDS. Spray pools or water playgrounds are basins containing spray features intended for recreational use, but that do not collect water in the basin. If the water is captured and recirculated, the pool shall meet the requirements of OAR, chapter 333, division 60. If potable water is used once and drained to waste, the spray pool or water playground is not regulated or licensed under these rules:
    - (A) Design spray pools with a zero-depth design, with no walls in the basin.

- (B) Spray pools do not require devices for skimming.
- (C) All water recirculated through the spray features shall be filtered and sanitized, or from a potable water source. Equipment capable of continuously supplying at least 0.25 ppm additional chlorine to the line returning water to the spray features must be provided, except when potable water is supplied, used once and drained to waste, or all the water is filtered and treated before being sent back to the water features.
- (D) Slip-resistant, easy to clean and water impervious surfaces must be installed in the spray basin. Impact attenuating surfaces, basin surfacing materials with shock absorbing properties, for use with equipment addressed in subsection (11)(b) of this rule, will be considered, but must be water impervious, not conducive to bacteria and algae growth, and resistant to vandalism and damage. All impact cushioning materials must be approved by the Division for use in a wet environment.
- (E) Spray pools do not require a security enclosure. At least six feet (1.9 m) of deck around the perimeter of the pool basin and sloped away from the basin must be provided.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: PH 17-2006, f. 6-30-06, cert. ef. 7-1-06; PH 6-2009(Temp), f. 6-16-09, cert. ef. 6-17-09 thru 12-13-09; Administrative

correction 12-23-09

# 333-060-0510 Existing Wading Pools

The requirements in this rule apply to all wading pools built before July 13, 2006.

- (1) RETRO-FIT RECIRCULATION SYSTEMS. All water-retaining wading pools need recirculation, filtration, and disinfection. Those wading pools without water recirculation shall be renovated, or phased out of use and removed, before December 31, 2009.
  - (a) COMPLIANCE. Operators of all wading pools affected by this rule must provide to the Division or its agent, before July 1, 2007, a proposed plan and timetable for renovation or removal of the pool.
    - (A) The proposed plan and timetable will be reviewed by the Division or agent health department and an acceptable plan and timetable will be negotiated or approved.
    - (B) Before renovation begins, construction plans, a plan review application and fees must be submitted to the Division or its agent to obtain approval and a construction permit.

- (C) If a wading pool operator fails to submit a plan by July 1, 2007, or fails to complete renovations or removal by December 31, 2009, the license for the pool will not be renewed:
  - (i) After December 31, 2009, wading pools without water recirculation systems and without a license to operate, are declared public nuisances under the authority of ORS 448.060; and
  - (ii) The Division or its agent, in compliance with ORS 448.060 may proceed with abatement of said nuisance.
- (b) INTERIM OPERATION. Operators of wading pools that have no recirculation, filtration or disinfection systems must change the water at least every four hours. This may be accomplished by gradual drainage, or by dumping and filling. This may continue until the wading pool is retro-fit or December 31, 2009 whichever comes first. Additional requirements include:
  - (A) At opening, and every two hours after that, until closing, the water must be tested and a chlorinating product added to reach a residual of 5 ppm.
  - (B) The water must be drained at closing each day. Before opening again, the basin must be thoroughly rinsed and any debris removed. The basin must be scrubbed at least weekly, with a solution containing at least 50 ppm of chlorine, mixed according to the directions on the chemical container. Potable water must be used to fill the pool and the chlorine level adjusted.
- (2) Protection against ENTRAPMENT, HAIR ENTANGLEMENT and EVISCERATION for all suction fittings will be provided on all wading pools, except those addressed in subsection (1)(b) of this rule by December 31, 2008.
  - (a) COMPLIANCE. If a wading pool operator fails to provide entrapment protection by December 31, 2008 the operator will close the wading pool until either protection is provided and approved by the Division or its agent, or the pool is removed. If corrections are not completed by December 31, 2009, the license for the pool will not be renewed.
    - (A) Before renovation begins; construction plans, a plan review application and fees must be submitted to the Division or its agent to obtain approval and a construction permit.
    - (B) After December 31, 2009, wading pools without entrapment protection and without a license to operate are declared public nuisances under the authority of ORS 448.060; and
    - (C) The Division or its agent, in compliance with ORS 448.060 may proceed with abatement of said nuisance, including summary abatement, if necessary.
    - (D) Renovations must meet the requirements of OAR 333-060-0505(5) after June 16, 2009.

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: PH 17-2006, f. 6-30-06, cert. ef. 7-1-06; PH 6-2009(Temp), f. 6-16-09, cert. ef. 6-17-09 thru 12-13-09; Administrative

correction 12-23-09

#### 333-060-0515 Wading Pool Operation

- (1) WATER QUALITY. All wading pools must maintain good water quality using the water quality parameters shown on OAR 333-060-0200 (Table 3). Chlorine residuals must be maintained at a minimum of 2 ppm, except that, compliance with section 333-060-0510(1)(b), is required for all wading pools without a recirculation system, except spray pools using potable water once and draining to waste.
- (2) TESTING. All wading pools must be tested for water quality and maintained at least every two hours. A record shall be maintained, as required in OAR 333-060-0205(2).
  - (a) ELECTRONIC MONITORING AND CONTROL EQUIPMENT. All wading pool facilities have until January 1, 2012 to install electronic sanitizer and pH monitoring equipment to control the chemical sanitizer and acid or base feeders. This equipment must measure and adjust the sanitizer residual and pH. New sanitizer monitoring equipment installations must use oxidation-reduction potential (ORP) for measurement of the disinfectant activity, and provide the readout in millivolts (mv) of potential. Readings in parts-per-million (ppm) are not required.
  - (b) For the operator to qualify for reduced manual testing frequencies, as established in OAR 333-060-0200(3)(d), electronic monitoring equipment reading in millivolts must be certified at least once every 12 months as operating accurately by a service technician trained by the manufacturer, and a minimum of ORP of 750 mv must be maintained.
  - (c) Certification of the Monitoring and Control Equipment. The certification check, made by the factory trained service technician, includes the probes and electronic equipment. If the equipment is found to need service or parts, the repairs must be made before the unit is certified.
    - (A) Certification includes testing and standardization of the meter equipment, and the use of standard solutions to verify the accuracy of each probe.
    - (B) A brightly colored certification tag will be attached to the readout unit of the monitoring equipment by the trained service technician. After the initial certification, the tag will show service and certification for at least the previous 36 months. The tag must show the following:
      - (i) The name, address, and phone number of the company employing the technician;
      - (ii) The technician's name;
      - (iii) The name and address of the facility;

- (iv) The make, model, and installation date of the equipment;
- (v) A record of all service, dates of service, and re-certification of the equipment for work completed by a trained service technician; and
- (vi) When the next certification testing is due.
- (vii) The calibration programming for the ORP measuring unit must be made inaccessible to the pool operator and non-certification trained personnel.
- (C) Upon request by the Department or its agent, the company employing the trained service technician must make available to the Department or its agent, information about the certifying technician=s training, training dates, any manufacturer certification and continuing education or training taken to remain current with the equipment technology. The company must also make information available to the Department about calibration equipment, standardization solutions and certification procedures.

#### (3) SAFETY SIGNAGE.

(a) <u>Warning signs</u>. Provide direct supervision of the wading pool, or place warning signs, in plain view, at the entrance(s) and inside the wading pool area. Each sign is to read,

"WARNING: NO LIFEGUARD"

in letters at least 4 inches (100 mm) high, and:

"PARENTS – Do not leave your children unsupervised"

in letters at least 2 inches (50 mm) high. If the pool is a spray pool or water playground without an enclosure, place the warning signs on four sides or not more than 50 feet apart, whichever is less.

(b) <u>Wading Pool Rules</u>. Post a sign in a conspicuous location within the pool area that contains the following information in easily readable letters at least 1 inch in height:

"Do not use the pool if you have had diarrhea in the last two weeks."

"All persons, who are not toilet trained, must wear swim diapers."

"Drinking and spitting of the pool water is discouraged."

If the operator does not provide direct supervision, add:

"For emergency assistance please contact (insert 911, or other emergency assistance site staffed during all hours the wading pool is open)."

"Please contact (insert contact person or agency and phone number) with any concerns about this pool."

Stat. Auth.: ORS 448.011

Stats. Implemented: ORS 448.005 - 448.100, 448.990

Hist.: PH 17-2006, f. 6-30-06, cert. ef. 7-1-06

# Water Quality Parameters TABLE 3

(333-60-200)

	<b>Parameters</b>	Min.	Ideal	Max.					
(a)	free chlorine	0.8 ppm	1.0 - 3.0 ppm	5.0 ppm					
(b)	combined chlorine	0	0	0.5 ppm					
(c)	bromine	3.0 ppm	3.0 - 5.0 ppm	8.0 ppm					
(d)	total copper	0	0	1.0 ppm					
(e)	total silver	0	0	0.05 ppm					
(f)	pН	7.2	7.4 - 7.6	7.6					
(g)	total alkalinity as	80 ppm	100 - 125 ppm	200 ppm					
	CaCo3								
(h)	cyanuric acid	0 ppm	30 ppm	150 ppm					
(i)	calcium hardness	lcium hardness 175 ppm							
	(recommended)								
(j)	turbidity (water clarity)	0/F.T.U.	0-0.5/F.T.U.	1.0/F.T.U.					
	(Or such clarity that a standard 2" (5cm) diameter clarity disc which is divided into alternate black and red quadrants is clearly visible and the separate colors discernible through 15 feet (4.57m) of water. Note: F.T.U. = Formalin Turbidity Unit.)								

(k) bacteria Coliform organisms shall not be present in more than 15 percent of any series of samples and pseudomonas aeruginosa or other human pathogen shall not be present in any samples tested using Standard Methods for Testing Water and Waste Water 16th Edition. (Note: it is not required that this parameter be checked routinely but shall be monitored at the discretion of the Health Division.)

#### **APPENDIX A**

Supplies to be included in the first aid kit:

First Aid pocket guide supply checklist assorted sterile gauze pads (4x4, 3x3, 5x9, etc.) with adhesive tape antiseptic wipes or hydrogen peroxide scissors tweezers triangular bandages roller gauze bloodborne pathogen spill kit disposable single use gloves eye protection, face shields, or goggles first aid pocket masks as a barrier for rescue breathing or CPR space blanket small trash bag or biohazard bag

# **Minimum Dimensions for Diving Portions of Public Swimming Pools**

Figure 1 – Pools Built After May 1, 1986

Figure 2 – Pools Built Before May 1, 1986

These diagrams and tables are available from the Department of Human Services – Public

Swimming Pool Program upon request. Please contact us at phone (503) 731-4012.

#### Appendix B

# POOL

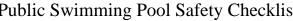
34-717 (Rev. 4/04)

### Public Swimming Pool Daily Record Sheet



Month / Year				Na	Name of Pool:							of Human Services  Location – City										
Daily Pre-Opening Tes					ctc	Free Cl/Br Readings (1 o						or 4 k	hre)				Comments –					
		Da	any Pre	e-Oper	ling re	:515	ek)	/ wk)	th)		_			the Tes				tal	Number of Bathers - Total Backwashed - Clean Filters	<b>∑</b>	8 Chemical Added /	cal Added /
Operator's Initials	DATE	Clarity	Pool Temp	Free Chlorine/Bromine	Combined CI	Hd	Total Alkalinity (1x / week)	Calcium Hardness (1x / wk)	Cyanuric Acid (1 x month)	Cyanuric Acid (1 x mon TDS (Monthly)								Number of Bathers - To		Recirculation Rate - GPM		
	1																					Кероп
	2																					
	3																					
	4																					
	5																					
	6																					
	7																					
	8																					
	9																					
	10 11																					
	12															1	1					
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	24 25																					
	26														-							
	27																					
	28																					
	29																					
	30																					
	31																					
Comments:							Swimming P  Free Chlorine Combined Chlorine Bromine pH Total Alkalinity			ie	Min. 0.8 pp 0 3.0 pp 7.2 70 pp	m m m	1.5-3 3.0-5 7. 80-1	deal 3.0 ppm 0 5.0 ppm 3-7.5 20 ppm	Meters Max. 5.0 ppm 0.5 ppm 8.0 ppm 7.6 180 ppm							
												_		Calciu Cya	ım Ha nuric		S	175 pp 0	m	250-3	350 ppm 0	- 150 ppm

**POOL** 





Public Swimming I	2001 Safety Checkfist of Human Services
Month / Year	License Number
Name of Facility	
Street Address	
City, State Zip	
Name of Operator	Phone
Monthly Safety	y Self-Inspection
Item Checked	Maintenance Comments
Pool & Enclosure  Fences – Openings < 4", Good Repair  Doors & Gates – Self-Closes, Completely Latches, Good Condition  Window / Sliding Glass Door – Open < 4"  Deck Equipment – Good Condition, Fasteners and Fittings not corroded Ladders – Handrail tight, Rungs tight Starting Blocks - Removed / Disabled Installed in >5" water depth  Deck – Clean, Disinfected, Good Repair, No Puddles, No Carpet/Matting/Wood Skimmers / Gutters / Tile Line – Clean, Good Repair  Lighting – Maintained, Adequate Safety Equipment – Provided, Good Repair First Aid Kit Stocked, Phone Working Rescue Tubes Provided and Used Test Kit – Clean, Stocked w/ Fresh Reagents, Stored in Cool, Dry Location  Recirculation Equipment Pumps / Filter / Disinfectant Feeders Maintained, Good Repair Gauges – Working, Accurate Readings within Parameters Piping – Good Repair, Marked, No Leaks	
	Supervision
technique, alertness, use of sun protection, distractions, rescuindividual coaching or in-service training. Documentation can	utine lifeguard supervision. Items such as rescue tube use, scanning ne incidents, people skills, etc. These notes can be used later for a show behaviors noted and modified for liability and supervision included, as needed, in each employee's personnel files.
Date Comment	Date Comment

34-717 (Rev. 4/04)

#### Appendix C

# Public Swimming Pool Accident / Drowning Report

This report must be completed for every physiciantreated accident or any drowning at a public swimming pool. It is the **responsibility of the pool operator** to submit the completed form promptly to the **Oregon Department of Human Services, Environmental Services and Consultation, 800 NE Oregon, Portland, OR 97232-2162** 

# State of Oregon Department of Human Services Health Services

Environmental Services and Consultation 800 NE Oregon Street # 21 Portland, Oregon 97232-2162 Phone (971) 673-0451 FAX (971) 673-0457



Date of Incident	Time: a	m pm	Accident ID Official Use On	# YYYY – MMDD - County #				
Victim Informati	on							
First Name	MI	Last Name						
Address Number	Street		Apt	#				
Address Number	Street		Арі	.ff				
City or Town	State	e Zip Code						
SEX: DM DF	Age of Victim:(yrs)	☐ Fatal 〔	☐ Non-Fatal	Non-Swimmer: ☐ Yes ☐ No ☐ Unk				
Area of the Body	y Injured: (Check all that Apply)	Type of Inju	ry: (Check al					
_			•					
☐ Head☐ Arm / Hand / F	☐ Trunk Finger ☐ Leg / Foot / Toe	<ul><li>□ Abrasion or Contusion</li><li>□ Concussion</li><li>□ Fracture</li></ul>						
☐ Other (Specify	•	☐ Laceration ☐ Other (Specify)						
Treatment Requ	ired: (Check all that Apply)							
□ No Treatment	☐ First Aid	☐ CPR (☐ Manual ☐ AED ☐ Oxygen)						
□ Doctor's Office	e/Emergency Room	Admitted to Hospital						
Other (Specify	<b>'</b> )							
Pool Information			Pool License	±				
Poor information	on .			•				
Name of Pool			l					
Address Number	Street							
7.00.000	<b>CC</b>							
City		State	Z	ip Code				
Contact Person								
147 (1		14/	oo o lifoausad	on duty at the time?				
Was th ☐ Ye	ne pool open at the time?	VV	as a lifeguard	on duty at the time?				

### Side 2 of 2

# Factors contributing to the accident (Mark as many as apply)

Slippery Surfaces:	☐ Around Pool	■ Bottom of Pool	☐ Other (Sp	pecify)					
Deck Equipment: □ L	.adder / Handrails 🚨 Life	eguard Equipment 〔	☐ Other (Spec	eify)					
Recirculation Equipment: ☐ Mechanical ☐ Electrical ☐ Other (Specify)									
Use of Pool Chemicals: ☐ Storage ☐ Handling ☐ Other (Specify)									
Pool Enclosure: 🗅 In	adequate 🚨 Gate - Ui	nlatched or Unlocked	☐ Other (S	pecify)					
Diving/Jumping/Sliding:	☐ From Board ☐ From	n Poolside 🚨 From S	Slide 🗖 Other	Specify					
Horseplay/ Miscalculation	n: (Specify)								
Other: (Explain)	☐ Involved Food/Drink	☐ Natural Caus	ses						
Were Others Injured: ☐ Yes ☐ No									
If Yes, Name(s)									
Describe what happened: (Please be legible)									
Print or Type Name:	Signature	<b>:</b> :		Date:					