



Public Health Division

Oregon Administrative Rules

Chapter 333 – Division 062

Public Spa Pools

This information is available in alternate format from the Oregon Department of Human Services - Health Services Public Swimming Pool Program at (503) 731-4012.

You may also obtain the rules from this website:

http://arcweb.sos.state.or.us/rules/OARS_300/OAR_333/333_062.html

Current Revision

First Published September 1994

Reformatting Changes: November 6, 2002

Reprint: 11 / 12 / 2002

Reprint: 1 / 08 / 2008

OREGON ADMINISTRATIVE RULES

CHAPTER 333 - HEALTH DIVISION

DIVISION 62

PUBLIC SPA POOL RULES

Purpose 333-62-005

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

Adoption by Reference 333-62-010

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

Definitions 333-62-015

As used in these rules unless otherwise required by context:

- (1) "**Administrator**" means the Assistant Director of Health of the Department of Human Resources.
- (2) "**Approved**" means approved in writing by the Division.
- (3) "**Bathhouse**" means a structure which contains dressing rooms, showers and toilet facilities for use with an adjacent public spa pool or public swimming pool.
- (4) "**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.
- (5) "**Cross connection**" means an unprotected connection between the piping carrying potable water and the piping or fixtures which carry other water or other substances.
- (6) "**Division**" means the Health Division of the Department of Human Resources.
- (7) "**General-use Public Spa Pool**" means any public spa pool other than limited-use public spa pool. Public spa 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 spa pools.
- (8) "**Horseplay**" means any unsafe activity which in the opinion of the Division or the spa operator endangers the spa users and bystanders.
- (9) "**Lifeguard**" means a person with current American Red Cross lifeguard, National Pool and Waterpark Lifeguard, YMCA lifeguard (or equivalent as determined by the Health Division) certification or license.
- (10) "**Limited-use Public Spa Pool**" means any public spa pool located at and operated in conjunction with a companion facility such as a residential housing facility having five (5) 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.
- (11) "**Oxidized**" means a process of chemically removing organic debris, using a product used to reduce combined chlorine and for the purposes of these rules is an alternative to superchlorination.
- (12) "**Person**" includes, in addition to the definition in ORS 174.100, municipalities, recreation districts, counties and state agencies or instrumentalities.

- (13) "**Private Swimming Pool**" means any swimming pool, wading pool or spa pool owned by no more than 4 individuals, either jointly, individually or through association, incorporation or otherwise and operated and maintained in conjunction with a companion residential housing facility and having no more than 4 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.
- (14) "**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.
- (15) "**Public Swimming Pool**" means an artificial structure and its appurtenances, which contains water more than two feet 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;
 - (l) Counties; or
 - (m) A state agency.
- (16) "**Public Wading Pool**" means an artificial structure and its appurtenances, which contains water less than two (2) feet 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.
- (17) "**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 primary disinfectant.
- (18) "**These rules**" mean OAR 333-62-005 through 333-62-185.
- (19) "**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.

Compliance 333-62-020

- (1) Public spa pools built prior to June 23, 1981, are exempt from the following requirements of these rules, provided such pools are constructed and maintained in accordance with the plans approved by the Division for construction of the spa pool, and provided the exemption does not present a health or safety hazard:
 - (a) Section 333-62-065 (3);
 - (b) Sections 333-62-085 (1), (2), and (10);
 - (c) Subsection 333-62-090 (2)(a);
 - (d) Sections 333-62-095 (3) and (4);
 - (e) Section 333-62-100 (2);
 - (f) Section 333-62-115 (2)(a),(b),(c);
 - (g) Section 333-62-140 (1).
- (2) The above exemptions do not apply to any alteration or replacement of the affected components.

Permit to Construct 333-62-025

- (1) No person shall construct a public spa pool or bathhouse adjacent thereto, or alter any such structures without:
 - (a) Submitting complete plans and specifications to the Division;
 - (b) Paying the stipulated plan review fee to the Division;
 - (c) Receiving a written plan approval or conditional approval from the Division;
 - (d) Paying the stipulated construction permit fee to the Division;
 - (e) 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 section (1) of this rule without the written approval of the Division.
- (4) Construction permits will be issued only to the owner or authorized agent of the owner.
- (5)
 - (a) The Division may issue a conditional construction permit where the plans and specifications for the proposed public spa 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 spa 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.

- (5) (b) 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 further establish the Division's expectancy of such protection. Furthermore, any license issued subject to a conditional construction 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 subsections (5)(a), (b) and (c) of this rule 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 spa pool statutes and rules.

Plans 333-62-030

- (1) Plans and specification 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 spa pool and address all requirements of these rules.
- (2) Plans shall be submitted in duplicate, drawn to scale and in sufficient detail to completely and clearly illustrate what is to be constructed and shall include:
- (a) One plan view;
 - (b) One cross section through the main drain;
 - (c) One overall plan showing the pool in relation to other facilities in the area.
(This plan may be combined with subsection (2)(a) of this rule);
 - (d) One detailed view of the equipment room layout;
 - (e) One vicinity map;
 - (f) 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 subsection (2)(a) of this rule.)
 - (g) One cross section of the step treads and risers.
- (3) Plans must show all required components of the spa pool and its appurtenances and 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 or authorized agent's name, address and telephone number;
 - (d) Surface area of pool;
 - (e) Pool volume, turnover 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 of backwash water and/or drained from the spa;
- (i) Specifications of materials relating to the spa pool, piping, inlets and outlets, skimmers.

Licenses 333-62-035

No person shall operate a public spa pool, without:

- (1) The pool having received a final construction inspection and approval from the Division;
- (2) Making application for a license to operate such a pool;
- (3) Paying the license fee; and
- (4) Securing a license from the Division.
- (5) Such license terminates and is renewable on December 31 of each year.

Conditional Licenses 333-62-040

- (1) Conditional licenses may be issued by the Division in circumstances in which:
 - (a) There is substantial compliance with these rules;
 - (b) In which a written schedule for total compliance approved by the Division is instituted and maintained; and
 - (c) Where in the judgment of the Division, there will be no immediate threat to health and safety during the time in which to meet complete compliance. The Division may also require special safeguards 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 333-62-025(5).

Maintenance and Modification 333-62-045

- (1) All equipment of public spa 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 spa pools and their appurtenances shall be maintained in good repair.

Size 333-62-050

Public spa pools shall be sized according to and shall not exceed the design limit of the bather load function shown below. Bather loads are specific in-tank loads only.

$$\text{Maximum Load} = A / 10$$

Where A equals the surface area of the public spa pool in square feet.

Dimensions 333-62-055

- (1) Public spa pools shall not have sharp edges or protrusions where walls meet at an acute angle. Public spa pools shall be shaped so as to provide for complete water circulation and mixing.
- (2) Public spa pools shall be no deeper than 4'(1.22m) measured from the water line.
- (3) The maximum depth of any seat or sitting bench shall be 2'0" (61cm) measured from the water line.

Finishes and Markings 333-62-060

- (1) Wall and floor finishes shall be of non-toxic materials, shall be impervious and enduring. Such finishes shall be smooth and easily cleanable.
- (2) Public spa pools shall have permanent depth markings plainly and conspicuously posted and located as follows:
 - (a) The maximum water depth shall be clearly marked;
 - (b) Depth markings shall be at least 4" (10cm) in height and of a contrasting color with the background;
 - (c) Depth markings shall be placed within 18" (46cm) of the water's edge and shall be positioned to be read while standing on the deck facing the water;
 - (d) Depth markings shall be spaced at no more than 25' (7.62m) intervals and shall be uniformly located around the perimeter of the spa.
- (3) Spas with wooden interior surfaces are not allowed.

Illumination 333-62-065

- (1) Where underwater lighting is used, the electrical circuit to the underwater light shall be equipped with a ground fault interrupter.
- (2) Where underwater lighting is not employed, and night or indoor bathing is permitted, the combined area and pool lighting shall be provided at no less than 2 watts incandescent or the equivalent per square foot of deck area.
- (3) Where underwater lighting is used, and night or indoor bathing is permitted, area lighting shall be provided for the deck areas and directed away from the spa pool surface. No less than 0.6 watts incandescent or the equivalent per square foot of deck area shall be used.

Ventilation 333-62-070

Buildings enclosing spa pools shall be ventilated in accordance with the requirements of the Oregon State Structural Specialty Code, 1993 Edition.

Ladder, Recessed Steps and Stairways 333-62-075

- (1) Spa ladders, recessed steps or stairways shall be provided where spa depth exceeds 24".
- (2) There shall be at least one ladder, set of recessed steps or stairway for each 50 feet of spa pool perimeter or fraction thereof.
- (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) Stairs shall be provided with at least one handrail.
- (5) Recessed steps shall drain into the pool.
- (6) Stairway treads shall have a minimum unobstructed horizontal tread depth of 10" (25cm) and a minimum unobstructed surface area of 240 square inches (154cm²).
- (7) 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). When the bottom tread serves as a bench or seat, the bottom riser shall be a maximum of 14" (35cm).
- (8) Ladders and handrails shall be securely mounted.

Spa Pool Enclosure 333-62-080

- (1) Public spa pools shall be protected by an enclosure. Such enclosure shall be a fence, wall, or building without private entrances to the pool area.
- (2) Spa pool enclosures including windows, gates and doors shall be constructed in such a manner so as to prevent access to the pool by unsupervised children and/or domestic animals and shall incorporate the following construction standards:
 - (a) Enclosures shall not be less than 4' (1.22m) in height measured from the outside ground 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" (107cm) separation.
 - (e) All exterior projections or recessions shall be 42" (107cm) from either the top or bottom of the fence.
 - (f) Gates and doors in spa enclosures shall be self-closing and shall be equipped with a lockable and self-latching device located at least 42" (107cm) above the ground. Entrances with self-closing and self-locking devices requiring the use of a key or combination to gain access shall have controls located at a minimum of 36".
 - (g) Construction methods and materials shall be used that provide a durable and low maintenance structure.
 - (h) Building enclosing public swimming pools shall be constructed 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.

Decks 333-62-085

- (1) A 6' x 8' continuous unobstructed deck shall be provided on at least one side of all public spa pools with less than 100 square feet of water surface. Public spa pools with 100 square feet of water surface area or more shall provide additional deck area at least 4 feet wide around at least 50% of the spa.
- (2) Walkways and decks shall be constructed of concrete, non-slip tile or equally impervious material with a smooth, but non-slip, easily cleanable surface.
- (3) Decks shall slope no less than 1/4" per foot (6mm per 30 cm).

- (4) Deck surfaces shall be slip-resistant.
- (5) Joints between concrete deck slabs shall be water tight 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. New and replacement expansion joints shall not be constructed of wood.
- (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) Decks shall be drained to perimeter drains.
- (10) Wood decking, around public spa pools is prohibited.

Overflow Systems 333-62-090

- (1) All public spa pools shall be operated with a continuous overflow.
- (2)
 - (a) Where surface skimmers are used, the flow rate through the skimmer shall be designed to provide 50% of the total turnover rate with a maximum flow through any single skimmer of 30 gpm;
 - (b) The minimum acceptable width for the intake throat of a skimmer, measured at the weir location, shall be 5";
 - (c) Where surface skimmers are used as the sole overflow system, one surface skimmer shall be provided for each 100 square feet (9.3m²) or fraction thereof of the spa's surface area. If a conflict arises between subsection (a) and this subsection, the subsection requiring the greatest number of skimmers shall apply;
 - (d) When two or more skimmers are used in a spa, they shall be located so as to maintain effective skimming action over the entire surface area of the spa.

Recirculation Systems 333-62-095

- (1) Public spa pools shall have recirculation systems and filtration systems with piping, pumps, filters, disinfection and other equipment which maintain spa pool water quality in accordance with OAR 333-62-165 (1).
- (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 spa water within 30 minutes.
- (3) The recirculation system shall be a two pump system. One pump will provide the required turnover rate, filtration and disinfection for the spa water. The second pump shall provide the water for the hydrotherapy turbulence of the water.
- (4) Public spa pool recirculation systems shall be separate from companion swimming pools.
- (5) Recirculation and filtration systems shall be in operation continuously while the facility is in use.

Inlets and Outlets 333-62-100

- (1) Pool inlets and outlets shall be provided, sized, and arranged to produce a uniform circulation of water so as to maintain a uniform disinfectant residual throughout the pool.

- (2) At least one outlet shall be provided at the lowest point of the pool floor to drain the entire floor area.
- (3) Total velocity through outlet grate openings shall not exceed 2 feet/second (0.67m/second).
- (4) Grates shall be designed so as to prevent entrapment of fingers.
- (5) Direct pool inlets shall:
 - (a) Be over-the-rim spouts with an air-gap located beside grab rails; or
 - (b) Be through-the-wall fill lines located above the water level and equipped with an appropriate backflow prevention device installed per OAR 333-61-099; or
 - (c) Be directly connected to the recirculation water supply and equipped with reduced pressure device installed per OAR 333-61-099 on the potable water supply adjacent to the connection with the spa pool recirculation water.
- (6) Spa outlets shall be designed so that each pumping system in the spa provides one of the following alternatives:
 - (a) Two outlets whose pipe diameter sizes are equal, the system shall be designed so that neither one of the two outlets shall be cut out of the suction line by a valve or other means which would allow entrapment of the bather on the suction orifices;
 - (b) One anti-vortex drain. The anti-vortex drain shall not provide a tripping or stubbing hazard to the feet. The minimum acceptable diameter for the anti-vortex plate is 6";
 - (c) Provide an open area of 144 square inches (30cm x 30cm) or larger grate.
- (7) All outlet grates, anti-vortex plates and inlet fittings shall have tamper-proof screws that cannot be removed except with tools. Grates, vortex plates and inlet fittings shall be in place whenever the spa is in use.

Piping 333-62-105

- (1) Spa pool recirculation piping shall be sized to carry the following maximum design flows:
 - (a) Discharge piping (except copper) -- 10 ft./sec. (3.05m/sec.);
 - (b) Discharge piping (copper) -- 8 ft./sec. (2.44m/sec.);
 - (c) Suction velocity -- 6 ft./sec. (1.83m/sec.);
- (2) Pool recirculation piping, if plastic, shall comply with National Sanitation Foundation Standard Number 14 for Plastic Piping System Components and Related Materials.
- (3) Spa pool backwash and/or drain lines shall be permanently piped with an air-break. For all spa pools built after May 1, 1986, the pool backwash and/or drain line shall be permanently piped with an air break to discharge into an approved sewerage system.

Pumps 333-62-110

- (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 developed by the complete system. Pumps shall be capable of providing design flow rates at no less than 60 feet (1.83kg/cm²) of total dynamic head.
 - (3) Pumps shall be capable of pumping at a rate sufficient to turn over the total pool volume within 30 minutes.
 - (4) Pumps on public spa pools built or remodeled after the effective date of these rules 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 section (3) of this rule under filter soil conditions such as to create pressures or vacuums at which manufacturers recommend filter cleaning.

Filters 333-62-115

- (1) Filters shall be capable of maintaining pool water clarity as described in OAR 333-62-165 (1)(i) under conditions of maximum user load.
- (2) Public spa pool filter rates shall not exceed the following:
 - (a) High rate sand filter -- 18 gpm per square foot (.093m²) of filter media or that rate approved by the manufacturer for that particular filter, whichever is less;
 - (b) Diatomaceous earth filters -- 1.5 gpm (5.7 lpm) per square foot (.093m²) of filter media;
 - (c) Cartridge filters -- 0.375 gpm per square foot of effective filter area. Effective filter area shall be that as determined by a testing laboratory recognized by the Division to make such tests;
- (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 meet the safety performance standards of the National Sanitation Foundation Number 50 for Circulation System Components for Swimming Pools.
- (6) Separation tanks or settling sumps 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.

Heaters 333-62-120

- (1) Fired water heaters installed after the effective date of these rules, used exclusively for heating water for spa 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 spa 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.
 - (c) Be equipped with metal or chlorinated polyvinyl chloride pipe (CPVC) for a minimum of 18 inches 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.

Disinfectant and Chemical Feeders 333-62-125

- (1) A means of disinfecting the public spa pool water shall be provided which provides a disinfecting residual in the pool waters at all times as described in OAR 333-62-165 (1)(a).
- (2) Automatic disinfection equipment for introducing a disinfectant shall be provided.
- (3) Disinfection equipment shall: Be equipped with suitable controls capable of fine feed rate adjustment.
- (4) Hypochlorinators, erosion (flow-through) feeders, or other adjustable output rate chemical 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 the effective date of these rules 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;
 - (F) Shall have a fail-safe mechanism which ceases chlorination in case of

malfunction;

- (G) Gas chlorinators shall be equipped with an anti-siphon chlorine injection device.
- (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 U.S. approved self-contained breathing apparatus approved by the U.S. Bureau of Mines 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 is permissible provided such equipment is readily available.

- (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 OAR 333-62-165 (1)(a);
 - (b) Be approved by the Division;
 - (c) Pose no adverse physiological hazards to the users and have a proven record of effectiveness.
- (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.

Air Induction Systems 333-62-130

- (1) Air induction systems, when provided, shall totally prevent water back-up that would cause electrical shock hazards.
- (2) Air intake sources shall be positioned and/or designed to minimize contaminants (such as deck water or dirt) from being introduced into the spa pool.

Valves, Meters, and Gauges 333-62-135

- (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 shall be installed on the inlet and outlet of the filter.
- (3) When the pump is below the overflow rim of the spa, valves shall be installed on permanently connected suction and discharge lines and located in an accessible place outside the walls of the spa. All valves shall be located where they will be readily and easily accessible for maintenance and removal.

Equipment Room 333-62-140

- (1) Spa pool equipment rooms shall be large enough to permit ready access to all equipment for both operation and maintenance with a minimum floor area of 50 square feet with a floor drain.

- (2) Spa pool equipment rooms shall be adequately ventilated.
- (3) Spa pool equipment rooms shall protect the equipment from the elements and be locked permitting access only to authorized personnel.
- (4) Equipment rooms shall be lighted to properly operate and maintain equipment.

Ground Fault Interrupter 333-62-145

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

Bathhouses and Sanitary Facilities 333-62-150

- (1) Where a spa 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 sections (2) through (5) of this rule are followed.
 - (2) Bathhouses in all spa pools operated as general-use public spa pools shall:
 - (a) (A) Meet requirements of:
 - (i) The Oregon State Structural Specialty Code, 1993 Edition;
 - (ii) The Oregon State Mechanical Specialty Code, 1993 Edition;
 - (iii) The Oregon State Electrical Specialty Code, 1993 Edition;
 - (iv) The Oregon State Plumbing Specialty Code, 1992 Edition.
 - (B) Including all permit and inspection requirements of the aforementioned codes.
 - (b) Provide toilets and lavatories within 1,000 feet (304.8m) of the spa;
 - (c) Contain dressing room(s) and sanitary facilities separate for each sex;
 - (d) Have floors which are slip-resistant, easily cleanable, and coved to a height of four inches (10cm);
 - (e) Have shower compartments with walls which are impervious to water to a height of six (6) feet (1.83m) 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);
 - (f) Have interior wall and ceiling finishes which are smooth, easily cleanable, and impervious to water;
 - (g) Where rubber or impervious mats are used, have such mats clean and dry between usages;
 - (h) Have shower stall floors that are finished with non-slip impervious surfaces;
 - (i) Where glass bath or glass shower doors are used, have such doors made of safety glass.
- (3) Sanitary facilities, based upon the following maximum user load and equal distribution of sexes, shall be provided:
 - (a) Toilets:
 - (A) Women, one per 40 spa users or fraction thereof, with a minimum of two;
 - (B) Men, one per 60 spa users or fraction thereof with a minimum of two.

Urinals shall be an acceptable substitute for no more than 1/2 of the toilets.

- (b) Lavatories adjacent to toilets, one per 60 spa users or fraction thereof.
- (c) Showers -- one shower head per 40 pool users or fraction thereof, with a minimum of two (2).
- (4) Hot and cold or tempered water only shall be provided at all shower heads.
- (5) Soap shall be provided at all shower heads and lavatories.
- (6) Hose bibs shall be provided for washing down the bathhouse interior.
- (7) Floors shall slope a minimum of 1/4 inch (6mm) per foot (30cm) and shall drain to floor drains.
- (8) The bathhouse shall be located within 1,000 feet (304.8m) of the spa pool.

Food Service 333-62-155

No food or drink shall be permitted within a four foot area surrounding the spa pool. 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.

Domestic Water Quality 333-62-160

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

Spa Water Quality 333-62-165

- (1) Water in public spa pools shall be maintained with water quality parameters within limits set out in Table 1.
- (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 shall be provided to test for total copper and silver concentrations 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 section (1) of this rule with the following minimum frequencies during periods when the pool is open for use:
 - (a) pH -- every 2 hours;
 - (b) Chlorine (Non-stabilized) -- hourly; chlorine (stabilized) -- every 2 hours; continuous reading devices shall satisfy requirements of subsections (3)(a) and (b) of this rule if such devices record in pH units and ppm of free chlorine;
 - (c) Bromine -- hourly; continuous reading devices shall record in units of ppm

- bromine;
- (d) Total alkalinity -- daily;
- (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) Turbidity -- daily;
- (h) Cyanuric acid -- weekly (when using stabilized chlorine);
- (i) Calcium hardness -- weekly (recommended)
- (4) Spa pools shall be drained and refilled with fresh water at least once every thirty(30) days.
- (5) Spa pool water shall be oxidized or superchlorinated as needed when combined chlorine exceeds spa water quality parameters, Table 1.
- (6) Notwithstanding the above, the Division may require any other testing frequency for a spa water parameter or a chemical added to the spa for the purpose of protecting public health.

Operation and Maintenance 333-62-170

- (1) Operators of public spa pools shall be thoroughly knowledgeable on good practices of the spa operation and with the laws and rules pertaining to public spa pools. If, at any time, testing indicates that the spa water does not conform with the requirements for clarity, minimum residual free chlorine or bromine, maximum temperature, or the pH exceeds 7.8 or falls below 7.0 the spa operator shall immediately close the spa to the public until the requirements are satisfied.
- (2) (a) Operators of public spa 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 OAR 333-62-165 (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 A.
- (3) All parts and facilities of public spa pools and bathhouses shall be kept clean, in good repair and free of safety hazards.

Safety 333-62-175

- (1) (a) The operator of any public spa pool shall report in writing to the Division any drowning, other death or injury requiring medical treatment occurring on the spa pool's premises;

- (b) Such reports shall be made on forms provided by the Division and shall be submitted within seven days of the occurrence.
- (2) Operators or managers shall make visual observation of the spa pool during operating hours. Such visual observation shall be at least once every two hours.
- (3) Lifeguards, pool operators and managers shall enforce the following rules at all public spa pools:
- (a) Non-swimmers and children under 14 years of age shall not use the spa pool unless a lifeguard or responsible adult observer is present;
 - (b) Bathers shall take a cleansing shower;
 - (c) No person suffering from a communicable disease transmissible via water or under the influence of an intoxicating liquor or drug shall use the pool;
 - (d) No person shall take food or drink inside the pool enclosure except in areas specifically designated for such use as described in OAR 333-62-155;
 - (e) No person shall bring, throw or carry food, drink, smoking material, trash, debris, or any other foreign substances into the pool;
 - (f) No person shall run or engage in horseplay in or around a public spa pool;
 - (g) Persons in street shoes shall not be permitted on the pool deck areas used by the bathers.
- (4) The hydrotherapy pump and air blower shall be connected to a maximum 15 minute timer switch located so as to be inaccessible to bathers in the spa pool.
- (5) Recirculation pumps and heater thermostat switches shall be inaccessible to bathers.

Signs 333-62-180

- (1) All public spa pools shall post a sign at the entrance to the spa pool enclosure reading as follows:

STOP

- All persons are required to take a cleansing shower before entering the spa pool.

CAUTION

- Elderly persons and those suffering from heart disease, diabetes or high blood pressure should consult their physician before using the spa pool. No person suffering from a communicable disease, transmissible via water, shall use the spa pool. Persons using prescription medications should consult their physician before using the spa pool.
- Individuals under the influence of alcohol should not use the spa pool.
- No person shall use the spa pool alone.
- Pregnant women should not use the spa pool without consulting their physician.
- Persons should spend no more than 15 minutes in the spa at any one session.
- All children under 14 years of age shall be accompanied by a responsible adult observer.
- No person shall run or engage in horseplay in or around the spa pool.

(2) Signs shall be a minimum of 24" x 18" with letters at least 3/8" in height.

Variance 333-62-185

- (1) The Division may grant a variance from requirements of these rules 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.

Water Quality Parameters

TABLE 1
(333-62-165)

<u>Parameters</u>	<u>Min.</u>	<u>Ideal</u>	<u>Max.</u>
(a) free chlorine	1.5 ppm	3.0	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) pH	7.2	7.4 - 7.6	7.6
(g) total alkalinity as CaCo3	80 ppm	Plaster & tile 175 ppm Spas 80-125 ppm 125 - 150 ppm	
Vinyl, painted or fiberglass finishes			
(h) cyanuric acid	0	30	150
(i) calcium hardness (recommended)	100	200	
(j) water temperature			104
(k) turbidity (water 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. = Formazin Turbidity Unit.			
(l) 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.)			

SPA

Public Spa Pool Daily Record Sheet



Month / Year	Name of Pool:	Location – City
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Operator's Initials	DATE	Daily Pre-Opening Tests					Total Alkalinity (2x / week)	Calcium Hardness (1x / wk)	Cyanuric Acid (1x / week)	TDS (Monthly)	Free Cl / Br Readings (1 or 2 hrs)					Number of Bathers - Total	Backwashed – Clean Filters	Recirculation Rate - GPM	Comments –
		Clarity	SPA Temp (<104°F.)	Free Chlorine / Bromine	Combined Cl	pH					Insert the Time the Test is Done (below)								
	1																		
	2																		
	3																		
	4																		
	5																		
	6																		
	7																		
	8																		
	9																		
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Comments:

34-717 (Rev. 4/04)

Public Spa Pool - Water Quality Parameters			
	Min.	Ideal	Max.
Free Chlorine	1.5 ppm	3.0 – 5.0 ppm	5.0 ppm
Combined Chlorine	0	0	0.5 ppm
Bromine	3.0 ppm	3.0-5.0 ppm	8.0 ppm
pH	7.2	7.3-7.5	7.6
Total Alkalinity	70 ppm	80-120 ppm	180 ppm
Calcium Hardness	175 ppm	250-350 ppm	-
Cyanuric Acid	0	0	150 ppm

Public Spa Pool Safety Checklist

Month / Year	License Number
Name of Facility	
Street Address	
City, State Zip	
Name of Operator	Phone

Monthly Safety Self-Inspection

<input checked="" type="checkbox"/> <u>Item Checked</u>	<u>Maintenance Comments</u>
Spa & Enclosure	
<input type="checkbox"/> Fences – Openings < 4”, Good Repair	_____
<input type="checkbox"/> Doors & Gates – Self-Closes, Completely Latches, Good Condition	_____
<input type="checkbox"/> Window / Sliding Glass Door – Open < 4”	_____
<input type="checkbox"/> Deck Equipment – Good Condition, Fasteners and Fittings not corroded	_____
<input type="checkbox"/> Stairs – Handrail tight	_____
<input type="checkbox"/> Depth Marking – Easily Readable	_____
<input type="checkbox"/> Deck – Clean, Disinfected, Good Repair, No Puddles, No Carpet/Matting/Wood	_____
<input type="checkbox"/> Spa Basin – In Good Repair	_____
<input type="checkbox"/> Skimmers / Gutters / Tile Line – Clean, Good Repair	_____
<input type="checkbox"/> Lighting – Maintained, Adequate	_____
<input type="checkbox"/> Safety Equipment – Provided, Good Repair First Aid Kit Stocked, Phone Working	_____
<input type="checkbox"/> Test Kit – Clean, Stocked w/ Fresh Reagents, Stored in Cool, Dry Location	_____
<input type="checkbox"/> Spa Temperature - <104°F. (Ideal 102°F. or less)	_____
<input type="checkbox"/> Water Changed – at least monthly, best changed when (“# of bathers” = Volume (gal.) / 3)	_____
Recirculation Equipment	
<input type="checkbox"/> Pumps / Filter / Disinfectant Feeders Maintained, Good Repair	_____
<input type="checkbox"/> Gauges – Working, Accurate Readings within Parameters	_____
<input type="checkbox"/> Piping – Good Repair, Marked, No Leaks	_____