

Recreational Water Facility Operations Guide

The following pages are a resource for recreational water facility owners and operators to ensure compliance with the governing Washington Administrative Code, Chapter 246-260. The full code, as well as other useful resources, can be found on our Pool Operator Information web page at www.clark.wa.gov/public-health/pools-and-beaches.

Operating permit

Any person operating a water recreation facility (pool, spa, wading pool or spray pad) needs a current permit issued by Clark County Public Health, or CCPH, pursuant to WAC 246-260-101. The permit is valid for one year and is subject to annual renewal. Permits are nontransferable. Refer to the environmental public health fee schedule located at www.clark.wa.gov/sites/default/files/dept/files/public-health/EPH_Misc/EPH_FEE_SCHEDULE.pdf for current operating fees.

Surveillance

Owners and operators of water recreation facilities shall allow a representative of CCPH to perform inspections as necessary to ensure compliance with standards pursuant to WAC 246-260-171 and 246-260-181.



Contact Recreational Water Safety

DLCntyHealthWaterRec@clark.wa.gov



CLARK COUNTY WASHINGTON

PUBLIC HEALTH
ENVIRONMENTAL HEALTH



Limited versus general use pools

Different types of facilities have different requirements. Limited use facilities include any swimming pool, spa, wading pool or spray pad at an apartment, assisted living facility, condominium, fraternity, home owners association, hotel, mobile home park, motel, recreational vehicle park, sorority or rental housing unit for use of residents and their guests. General use facilities are all public pools that do not meet the definition of a limited use facility. If an organized program occurs at a limited use facility (such as swimming lessons), the facility will be considered general use for the duration of the activity and has to meet requirements of a general use facility.

Water quality standards

Operators need to maintain safe water quality at all times, pursuant to WAC 246-260-999. Below are the required ranges to ensure safe water quality.

REQUIRED DISINFECTANT LEVELS

TYPE OF DISINFECTANT	MINIMUM	MAXIMUM
Swimming pool		
Chlorine	1.5	10.0
Chlorine with cyanurate Compound (stabilized)	2.0	10.0
Bromine	2.5	10.0
Spa, wading pool and recreational water feature (e.g. spray pad, interactive fountain)		
Chlorine	3.0	10.0
Chlorine with cyanurate Compound (stabilized)	3.5	10.0
Bromine	4.0	10.0

REQUIRED RANGES FOR SELECTED CHEMICAL AND PHYSICAL WATER QUALITY CONSTITUENTS

CHEMICAL/PHYSICAL	MINIMUM	MAXIMUM
pH	7.2	8.0
Temperature	-	104 F
Cyanuric acid	-	90 ppm
Combined chlorine	-	50% of free chlorine
Water clarity	Main drain and pool bottom must be visible at all times	

RECOMMENDED RANGES FOR SELECTED CHEMICAL AND PHYSICAL WATER QUALITY CONSTITUENTS

CHEMICAL/PHYSICAL	MINIMUM	MAXIMUM
Alkalinity		
Plaster pools	80 ppm	120 ppm
Painted, vinyl, fiberglass	100 ppm	150 ppm
Calcium hardness		
Swimming pool	200 ppm	400 ppm
Spa	150 ppm	250 ppm

Spa/spray pad reservoir cleaning

Spas and recirculating spray pads must be routinely drained, cleaned and refilled at the minimum duration determined by the following formula (WAC 246-260-131 (4)):

$$\text{Spa/spray pad volume} \div 3 \div \text{average number of users per day} = \text{number of days between draining, cleaning and refilling}$$

Example: 500-gallon spa with 10 users per day would need to be drained, cleaned and refilled at least once every 16 days.

Reporting and record keeping

Operators must report to CCPH any death, injury or illness that occurs at the water recreation facility. Refer to the injury report form located on the [CCPH Pool Operator Information web page](#).

Operators must perform routine tests to ensure safe water chemistry. The test results must be recorded and kept on file for three years and must be available upon request. The CCPH log is recommended to ensure record keeping requirements are being followed. Logs can be found at our Pool Operator Information web page at www.clark.wa.gov/public-health/pools-and-beaches.

LOGGING REQUIREMENTS

ONCE DAILY	ONCE WEEKLY	AS OCCURS
Disinfectant: free chlorine or total bromine	Alkalinity	Any chemicals
Combined chlorine	Cyanuric acid (if used)	
pH		
Temperature		
Flow rate		
Water clarity		

Testing equipment

Operators must use the appropriate reagents to measure residual disinfectant levels. A titration test kit with DPD powder is required to test for free and total chlorine from 0.2 ppm to 10.0 ppm or higher. The test kit must be able to test pH from 7.0 to 8.0 or greater. Facilities using stabilized chlorine must provide cyanuric acid testers with a range of 20 ppm to 100 ppm. The test kit must be able to test alkalinity from 0 to 300 ppm. A digital read out thermometer should be used to measure the spa temperature. The above are pursuant to WAC 246-260-999.

Remodels, design and construction

Prior to a remodel of an existing recreational water facility, CCPH must be notified of the proposed changes, per WAC 260-260-021. A plan review may be required for changes to the clubhouse, adjacent buildings, restrooms, pool structure and/or barrier design. Location, materials to be used, walking surfaces, fencing and other barriers, appurtenances, pool surfaces, floors and walls must conform with WAC 246-260. All new construction projects are required to go through a complete plan review.

Barriers

All water recreation facilities are required to have barriers that meet code requirements. Barriers may not be grandfathered in based on the date the barriers were built or installed. Limited use pools are required to have barriers that are at least 60 inches high (72 inches for general use pools). All barriers must prevent the passage of a 4-inch diameter sphere and not have any indentations or protrusions that could act as a step. All gates and doors leading into the recreational water area must be self-closing and self-latching with handles 60 inches off the ground or have a keyed lock. Facility staff is responsible for monitoring and making repairs as necessary to ensure compliance at all times.

Walking surfaces

Walking surfaces must be maintained to prevent tripping hazards, pooling of water and transfer of disease. Walking surfaces must be a minimum of 4 feet wide and have a nonslip, impervious and cleanable finish. Any gap or elevation change exceeding .5 inches is considered a trip hazard and must be repaired.

Inlets and outlets

All water recreation facilities are required to have main drains that prevent entrapment. This requirement can be met by having dual main drains that are hydraulically balanced with a minimum distance of 3 feet apart, or by providing an additional entrapment prevention measure for a single main drain. In Washington, a single, unblockable drain or dual main drains closer than 3 feet apart are required to have a secondary entrapment prevention measure. Main drain covers are to be checked often to make certain they are secure. If a drain cover becomes loose or breaks, the pool or spa must be closed immediately until the cover can be replaced or secured.

Overflow (skimmer or gutter) systems must maintain at least 60 percent of the flow through the filter recirculation at all times. Skimmer systems must have weirs with automatically adjustable gates to provide continuous skimming action.

Pool appurtenances

Owners shall ensure all handrails, hand holds, step risers, stairs, ladders and step holes are properly spaced, marked, secured and maintained, per WAC 246-260-031 (11). Check handrails regularly for stability.

Depth markings

The pool depth must be marked on both the vertical and horizontal surfaces of the pool. The deck markings must be at least 4 inches high and the vertical pool wall markings at least 2 inches high. The unit of measure ("feet") must be after each number, per WAC 246-260-041(8).

A safety line (floats) or marking line (on the bottom and sides of pool) must be placed at the area where a uniform



slope changes to a deeper area of the pool. If a float line is used, it must be installed at all times, according to WAC 246-260-041(9).

Turnover rate

For swimming pools, the water volume must be returned through the filter/disinfection system every six hours or less per WAC 246-260-041(7). For example, a 20,000-gallon pool needs a flow of 55 gallons per minute or more.

For spa pools and spray pads, the turnover rate shall be between 10 to 30 minutes depending on the volume and number of bathers. See WAC 246-260-051(4) for specifics. For example, a 750-gallon spa needs a flow of 25 gallons per minute to provide a turnover every 30 minutes.

For wading pools, the turnover rate must be three hours or less. If on the same recirculation system as a swimming pool, proper means to ensure efficient turnover and treatment of the wading pool must be maintained.

Water source

Water source for filling and maintaining the pool/spa/wading pool/spray pad area must conform to WAC 246-290. The wastewater must go to sanitary sewer and be protected from back siphoning, such as being indirectly drained. Water shall not be cross connected.

General equipment room information

Pumps must be maintained to ensure adequate capacity to provide the designed flow rate for the entire operating and backwash cycle. Strainers must be provided before the filters. Valves must be provided to allow isolation and maintenance of equipment. Adequate space (at least 3 feet)

is required between equipment to allow maintenance. Filters must meet the type and rates indicated in WAC 246-260-031(16). Pressure gauges need to be installed preceding and following the filter. A flow meter must be installed on the pipe that returns to the pool. For best results, install the flow meter after the filter on a straight section of pipe as far from any elbows as possible. Ventilation must be adequate to prevent moisture build-up in indoor areas. Equipment rooms must be kept locked when not in active use.

Disinfection equipment

Operators shall provide a continuous and effective automatic disinfectant residual through an approved erosion feeder or dispensing system. Hand feeding is allowed on an emergency basis only. Solid tablets or granules may not be placed in skimmer baskets directly. Operators must conform to these and other sections in WAC 246-260-031 (17).

pH control equipment

A pH control feeder is required for pools larger than 50,000 gallons and spas larger than 10,000 gallons. Monitor equipment for calibration needs frequently to ensure proper pH levels.

Chemical storage

Chlorine and other chemicals should be stored in a separate room or area. All the chemicals should be stored off of the floor. Acids should be stored as far from bases (soda ash) as possible. Liquids should be stored below solids (including powders and other granular substances). Organic chlorine (such as tri-chlor tablets) should never be mixed with inorganic (such as calcium hypochlorite), and their containers should not be used for other purposes, per WAC 246-260-031(14). Clear chemical storage area of all unnecessary clutter. Clean up spills immediately and according to the directions on the original packaging labels.

Restroom, locker rooms, diaper changing stations and plumbing fixtures

To be in compliance with WAC 246-246, all limited use facilities should provide private showers, diaper changing stations, sinks, toilets and/or dressing rooms if the distance to the nearest living units or rooms is greater than the distances indicated in WAC 246-260-031(21). All general use swimming pools must provide showers, diaper changing stations, dressing rooms, toilets, lavatories and hose bibs and conform to WAC 246-260-031 (21). Shower facilities must deliver water temperature within a range of 90° to 120° F and provide single service soap in non-glass dispensers. Restroom facilities must be available at all times the pool/spa/spray pad is open to the public.



BATHER LOADS

INDOOR POOL	OUTDOOR POOL	SPA	WADING POOL
Surface area of shallow ÷ 25	Surface area of shallow ÷ 15	Volume ÷ 30	Total surface area
+	+	÷	÷
Surface area of deep ÷ 30	Surface area of deep ÷ 30	6.67	7

Note: round the number down to determine safe bather load. Refer to WAC 246-260-041(10), 246-260-051(3) and 246-260-071(6).

Emergency equipment

All swimming pool facilities must have a fully stocked, standard 16-unit first aid kit and a blanket for emergency use. A telephone is required within one-minute access of the pool area. (WAC 246-260-041(11)). The first aid kit and telephone must be available to the bathers at all times the pool deck is open to the public.

Non-lifeguarded pools need to provide a solid reaching pole (at least 12 feet long) with a double crook life hook and a throwing ring buoy with attached rope that measures, at minimum, the width of the pool.

General use swimming pools with a lifeguard need to provide a rescue tube or rescue buoy at each lifeguard station and a backboard with means to secure a victim to a board and immobilize head, neck and back.

Personnel (lifeguards, attendants) duties

Lifeguards or attendants must wear a distinguishing suit, uniform or emblem and must be equipped with a whistle or a signaling device. Lifeguards must maintain current certificates from one of the approved agencies indicated in WAC 246-260-99901.



Bather loads

To determine the appropriate bather load for your recreational water facility, refer to the chart above.

Food service and drinking fountains

Food and beverages are prohibited in the water. Any tables and chairs must be four feet from the pool edge. Glass must not be used in pool facilities. For general use pools, a separate enclosure for food and beverage consumption must be provided. The sale or consumption of alcohol is prohibited at general use pools. Drinking fountains are required at general use swimming pools.

Control of bathers and signage

It is the responsibility of facility owners and operators to ensure bathers are notified of the terms of use and to enforce those terms as necessary. A sign clearly stating the rules must be posted in a conspicuous location that communicates the following messages for limited use pools, general use pools, wading pools and spas:

1. Prohibits running or horseplay.
2. Prohibits use by persons under the influence of alcohol or drugs.
3. Prohibits use by persons with communicable diseases or anyone ill with vomiting or diarrhea within the last two weeks.
4. Prohibits food or drink in the pool water.
5. Requires a cleansing shower before entering the pool.
6. Requires anyone in diapers to wear a protective cover to prevent contamination.
7. Requires diapers to be changed at designated diaper changing areas.
8. Warns patrons that anyone refusing to obey the rules is subject to removal from the premises.
9. Directs patrons to the location of the nearest telephone and first aid kit for emergency use.

10. Advises patrons that anyone with seizure, heart or circulatory problems should swim with a buddy.
11. Where diving boards are used, provide signs for proper use.

For facilities that do not have a lifeguard or attendant present, the following messages must also be communicated:

1. When pool is used by children 12 years of age or younger, a responsible adult 18 years old or older shall accompany the children and be at the pool or pool deck at all times the children use the facility.
2. When the pool is used by persons 13 to 17 years old, a minimum of two people must be at the pool facility at all times the pool is in use.

For spas, the following additional messages must also be communicated:

1. No child 6 years old or younger may use a spa pool.
2. Persons suffering from heart disease, diabetes or high blood pressure should consult a physician before spa use.
3. Women who are or may be pregnant should seek the advice of a physician regarding spa use and limit their time in the pool.
4. All persons should limit the stay in the spa pool to 15 minutes at any one session.
5. The maximum bathing capacity of the spa pool must be posted.

Monitoring and operation plan

It is the responsibility of facility owners and operators to routinely monitor the recreational water facility and to follow an operation plan. Operation plans should include at a minimum:

1. Routine checks of the physical components per WAC 246-260-131.
2. Have an emergency response plan per WAC 246-260-131 (9).

3. Establish rules of conduct for facility users to ensure health and safety per WAC 246-260-131 (5).
4. Close the facility or portion of facility when it presents an unhealthful, unsafe or unsanitary condition. These conditions include lack of compliance with water quality or operation requirements as detailed under WAC 246-260-111, 246-260-131.
5. Monitor weather conditions and close the facility for electrical storms and possibly other factors, such as wind or fog, per WAC 246-260-131(10).
6. Provide lifeguards with the necessary training for general use pool or limited use pools that have periods of time operating as a general use pool. Full requirements are outlined in WAC 246-260-131 (6).

Closed or not in operation

The recreational water facility owner and/or pool operator are responsible for preventing access to pools/spas/spray pads that are closed for the season, for repairs or permanently decommissioned.

If all pools within an enclosure are closed, access can be prevented by means of locked barriers. If a pool enclosure area has one pool open and another closed (for example, a closed seasonal pool in the same enclosure as a year-round spa, or if one body of water is closed for repairs), the pool that is closed must have a conspicuously posted closed sign while meeting required water quality standards or have a safety cover meeting ASTM standard F1346-91 installed. The closed pool/spa/spray pad may not create a nuisance or disease hazard.

All pool covers must be completely removed during periods when the pool is open for use. If a pool that is closed develops an ice layer, the owner must install a safety cover meeting ASTM standard F1346-91 or the entire pool enclosure area must be closed.

If a pool facility is not in operation for more than 12 months, the owner must install a safety cover meeting ASTM standard F1346-91 or back fill the pool.



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For other formats, contact the Clark County ADA Office

Voice: 564.397.2322 / Relay: 711 or 800.833.6388 / Fax: 564.397.6165 / Email: ADA@clark.wa.gov