



Changes to Pool Code

The following changes to Title 22 of the California Code of Regulations (CCR) will take effect on **January 1, 2015**:

1. Operational Records (65523)

A new requirement has been added stating pool operators shall test the **combined chlorine** as often as necessary (code does not specify daily) to maintain a maximum concentration below 0.4 ppm. The test results and any corrective action must be recorded. *Previously, operators were not required to check or record the combined chlorine concentration.*

Note: Due to proposed legislation to remove this requirement, EHS will not be enforcing this in 2015.

A new requirement has been added that requires pool operators to record any incident of fecal, vomit, blood contamination, near-drowning, or drowning that occurs in a pool. *Previously, no requirement was specified in Title 22.*

Pool operators are now required to maintain data and records for at least two years. *Previously, no requirement was specified in Title 22.*

2. Recirculation and Water Treatment System Operation (65525)

The variation in flow rate of an operating recirculation system shall not drop below 75% of the required flow rate in 3124B, Title 24, CCR. For example, if the required flow rate on a recirculation system is 100 gallons per minute (gpm), at no time shall the flow rate drop below 75 gpm. *Previously, the variation in flow rate was not to drop below 65% of the required flow rate.*

3. Public Pool Disinfection (65529)

Code now specifies minimum free chlorine residual as follows:

- **Public pools: 2.0 ppm** with cyanuric acid or **1.0 ppm** without cyanuric acid.
- **Public spas, wading pools, and spray grounds: 3.0 ppm** whether cyanuric acid is present or not. *Previously, a minimum free chlorine concentration of 1.5 ppm was required if cyanuric acid was present.*

Code now specifies a **maximum free chlorine** level of **10.0 ppm** for all pools. *Previously, Title 22 did not specify a maximum free chlorine level.*

Code specifies a **minimum Bromine** residual as follows:

- **Public Pools: 2.0ppm**
- **Public Spas, Wading Pools, and Spray Grounds: 4.0ppm.** *Previously, Title 22 stated: If halogens other than chlorine are used, residuals of equivalent strength shall be maintained.*

Code now requires **Ultraviolet Light** disinfection at spray grounds. A minimum of **40 mJ/cm²** continuous disinfection is required. If the level drops below 40 mJ/cm², the operator shall close the spray grounds. *Previously there was no such standard.*

4. Public Pool Water Characteristics (65530)

Water characteristic requirements are as follows:

- pH minimum: 7.2 **pH maximum 7.8** Maximum pH was 8.0.
- cyanuric acid maximum: 100ppm
- **combined chlorine maximum: 0.4 ppm** Previously no limit was specified. Note: Due to proposed legislation to remove this requirement, EHS will not be enforcing maximum combined chlorine in 2015.
- maximum water temperature: 104°F

5. Public Pool Water and Indoor Air Quality Standards (65531)

Title 22 now requires that indoor air quality at the public pool site and ancillary facilities (i.e. restrooms, showers, etc.), in addition to chemical quality of pool water, not cause adverse physiological effects, such as irritation of the eyes, lungs, of the pool users. Previously, no requirement for indoor air quality was specified in Title 22.

6. Safety and First Aid Equipment (65540)

A spa may now be required to have a rescue pole, length based on the unique configuration of each spa. It shall be sufficient length to effectuate a rescue. No previous requirement on a spa. Pools are still required to have 12 foot minimum fixed-length rescue pole.

Pools with lifeguards are now required to have a “Red Cross 10-Person Industrial First Aid Kit,” in addition to an operating telephone and a backboard and head immobilizer. Previously, no requirement was specified in Title 22.

The pool operator is now required to provide a rescue pole and a life ring on at least two opposing sides of the pool at centralized locations for all pools exceeding 75 feet in length or 50 feet in width. Previously, no requirement was specified other than one rescue pole and one life ring.

7. Health of Employees and Public Pool Users (65541)

No public pool employee having a communicable disease while in the infectious state shall work in any capacity. Previously, no requirement was specified in Title 22.

No public pool employee having a communicable disease while in the infectious state or while having symptoms such as a cough, cold, cold sores, or nasal or ear discharge or when wearing bandages, shall enter public pool water unless written statement is provided by a licensed physician. Previously, no requirement was specified in Title 22.

If two or more lifeguards or pool users at a public pool report within 5 days of each other to the pool operator that they had diarrhea, the pool operator is now required to report this to the enforcing agency (*Division of Environmental Health Services*). Previously, no requirement was specified in Title 22.

8. **Fecal, Vomit, Blood Contamination, and Near-Drowning or Drowning Incident Response (65546)**

New procedures for pool operators have been added to Title 22 in case of a fecal, vomit, blood contamination, near-drowning or drowning incident. **Previously, no procedures were specified in Title 22.**

In responding to a fecal, vomit, blood contamination, or near-drowning or drowning incident, the pool operator shall perform the following disinfection procedures:

- 1) Closing the affected public pool to pool users
- 2) Removing contaminated material
- 3) Keeping the pool water pH at or below 7.5
- 4) Maintaining water temperature at 77°F or higher
- 5) Ensuring the filtration system is operating while the public pool reaches and maintains the required free-chlorine concentration during the disinfection process
- 6) Disinfecting the pool water as follows:
 - i. If Formed fecal stool, or vomit, maintain free chlorine at 2ppm for at least 25 minutes
 - ii. If Diarrheal fecal stool, maintain free chlorine at 20ppm for at least 12.75 hours (If the pool contains cyanuric acid, pH must be lowered to 6.5 and free chlorine to be maintained at 40ppm for at least 30 hours).
 - iii. If Blood, and free chlorine is below the minimum, pool shall close until the minimum is achieved.
- 7) Testing the free-chlorine residual at multiple points to ensure the required free-chlorine concentration is achieved throughout the public pool water for the entire disinfection time
- 8) Replacing any affected cartridge filters and backwashing noncartridge filters after the disinfection process has been completed
- 9) Not allowing pool users back into the public pool until the disinfection process has been completed and the free-chlorine concentration and pH have returned to normal operating ranges

In addition to the procedures listed above, the pool operator is now required to document the incident with the following information:

- 1) Date and time of the incident, the affected pool, the available free-chlorine concentrations, pool temperature, and pH at the time of the incident, and facts known about the circumstances and cause of the incident
- 2) Whether the fecal stool was formed or diarrheal
- 3) The procedures followed in responding to the contamination incident
- 4) The number of pool users in the public pool and the length of time between the occurrence, detection, and resolution of the incident