

MARICOPA COUNTY ENVIRONMENTAL HEALTH CODE

CHAPTER VI

BATHING PLACES - PUBLIC AND SEMIPUBLIC SWIMMING POOLS

SECTION 2

WATER QUALITY STANDARDS

REGULATION 1. Quality of Water

Swimming pool water shall be treated and maintained so that whenever the swimming pool is open for use, the bacterial, chemical and physical quality of the water meets the standards set forth in these regulations.

REGULATION 2. Water Source

An operator of a public or semipublic swimming pool or spa shall ensure that the swimming pool or spa is filled only with potable water from an approved source.

REGULATION 3. Bacterial Standards

Not more than 15 percent (15%) of the water samples collected from a pool shall:

- a. Contain more than 200 bacteria per milliliter as determined by the standard (35°C [95°F]) agar plate count, or
- b. Show a confirmed positive test for coliform organisms in any of the five (5) - ten (10) milliliter portions of a sample or more than one (1) coliform organism per 50 milliliters when the membrane filter test is used. All samples shall be collected, de-chlorinated, or similarly neutralized when another disinfectant is used, and examined in accordance with the procedures outlined in the latest edition of "Standard Methods for the Examination of Water and Wastewater". The Department may collect, or require the owner to collect and submit water samples for bacteriological examination on a routine basis while it is in active use.

REGULATION 4. Chemical Standards

Pools and spas shall be continuously disinfected by an approved means, which will maintain an adequate and readily measurable residual of disinfectant in the water.

- a. Whenever chlorine, or a chlorine compound, is employed for pool disinfection the amount of free chlorine residual in the water shall not be less than 1.0 ppm or more than 5.0 ppm for public and semipublic swimming pools, and shall not be less than 3.0 ppm or more than 5.0 ppm for a hydrotherapy pool, at a pH of 7.2 to 7.8.
- b. Bromine disinfection equipment for a public or semipublic swimming pool shall be designed to maintain a bromine residual of 2.0 ppm to 4.0 ppm. Bromine disinfection

equipment for a public or semipublic spa shall be designed to maintain a bromine residual of 3.0 ppm to 5.0 ppm.

- c. Total alkalinity shall be maintained between 60 ppm and 180 ppm. Whenever chlorinated isocyanurates or isocyanuric acid is applied to the water for stabilization, a level of 100 ppm or less shall be maintained. The procedure for determination of free chlorine residual shall be by the DPD method or any of the other procedures outlined in the latest edition of "Standard Methods for Examination of Water or Wastewater".

REGULATION 5. Physical Standards

- a. The surface of the pool water shall be kept free of scum and floating debris. The bottom and sides shall be maintained free of sediment, dirt, slime and algae. Water shall be maintained free of turbidity and shall be sufficiently clear so that the main drain outlet is clearly visible to an adult standing on the pool deck, or that a Secchi Disk 200 mm in diameter when placed at the bottom of the pool at the deepest point is clearly visible to an adult standing on the pool deck.
- b. The temperature of heated water coming into a bathing place shall not exceed 104°F (40°C).

REGULATION 6. Tests

All pools shall be equipped with approved test equipment to determine pH, disinfectant residual, total alkalinity and temperature. The chemical disinfection level, pH, total alkalinity, and temperature of the water shall be tested at least once daily and an operating log that includes the results of these tests shall be maintained for 12 months and made available to the Department, any other regulatory authorities, or a member of the public upon request.

REGULATION 7. Fecal Contamination in Public and Semipublic Swimming Pools and Spas

- a. If solid feces are found in a public or semipublic swimming pool or spa, an operator of the swimming pool or spa shall ensure that:
 - 1. Each individual in the swimming pool or spa is required to exit the swimming pool or spa and the swimming pool or spa is closed,
 - 2. The feces in the swimming pool or spa are removed and disposed of in a toilet;
 - 3. The chemical disinfection level of the water in the swimming pool or spa is tested to determine whether the water complies with the water quality and disinfection standards in Section 2, Regulation 4; and
 - 4. The swimming pool or spa is not reopened until a test conducted under Subsection a., 3. indicates that the water complies with the water quality and disinfection standards in Section 2.
- b. If liquid feces are found in a public or semipublic swimming pool or spa, an operator of the swimming pool or spa shall ensure that:
 - 1. Each individual in the swimming pool or spa is required to exit the swimming pool or spa and the swimming pool or spa is closed;
 - 2. The swimming pool or spa is closed for at least 24 hours;

3. As much of the liquid feces as possible in the swimming pool or spa is removed and disposed of in a toilet;
4. The swimming pool or spa is chemically treated with a shock treatment;
5. The water in the swimming pool or spa is tested 24 hours after applying the shock treatment to determine whether the water complies with the water quality and disinfection standards in Section 2; and
6. The swimming pool or spa is not reopened until a test conducted under Subsection b., 5. indicates that water complies with the water quality and disinfection standards in Section 2, Regulation 4.