

# MARICOPA COUNTY ENVIRONMENTAL HEALTH CODE

## CHAPTER VI

### BATHING PLACES - PUBLIC AND SEMIPUBLIC SWIMMING POOLS

#### SECTION 12

#### ARTIFICIAL BATHING LAKE

##### **REGULATION 1. General Health and Safety Requirements**

The design, construction, operation and maintenance of artificial bathing lakes shall be such as to reduce to a minimum the risks of drowning, injury and transmission of disease.

- a. The facilities operation shall be under the close supervision of the owner or his designated representative.
- b. The operator(s) shall perform tests or have tests performed by a certified laboratory to show the degree of compliance with these regulations and shall record the results of the tests in the daily operation record. Such records shall be maintained on the premises and made available to the Department upon request. They shall include as a minimum:
  1. pH - once daily
  2. Bacteriological results - weekly
  3. Turbidity, as measured by Secchi disk - once daily
  4. Temperature - once daily
- c. Persons with sore or inflamed eyes, colds, nasal or ear discharges, boils or other acute or obvious skin or body infections, or cuts shall be excluded from the artificial bathing lake. No person in or at an artificial bathing lake shall commit, or be permitted to commit, any act prejudicial to the life or health of any other person using the artificial bathing lake. Domestic animals shall be excluded from the bathing area(s).

##### **REGULATION 2. Water Quality - Hazard Control**

The waters and environs of all bathing area(s) shall be kept free of slime, algae, aquatic growths, organic sediments, debris and other offensive materials. The breeding of mosquitoes, midges, water snails, and other aquatic pests shall be properly controlled.

- a. The water shall, at all times, be such that there is no irritation to the eyes or the skin of the bathers, nor other objectionable physiological effects to the bathers.
- b. Operators of a public or semipublic natural bathing place, a semi-artificial bathing place, or an artificial lake shall ensure that the public or semipublic natural bathing place, semi-artificial bathing place, or artificial lake meets the narrative and numeric water quality standards in 18 A.A.C. 11, Article 1 when the public or semipublic natural bathing place, semi-artificial bathing place, or artificial lake is open for water contact recreation. Operators shall collect one (1) sample per one (1) acre in the bathing area and one (1) sample per ten (10) acres of overall lake surfaces. Samples shall be collected and examined in accordance with the procedures outlined in the latest edition of "Standard

Methods for the Examination of Water and Wastewater". The owner shall collect and submit weekly water samples for bacteriological examination on a routine basis while the bathing area is in active use.

- c. An artificial bathing lake shall be located so that it will not be adversely affected by the discharge of sewage or objectionable industrial wastes; nor shall it be so located that by its use it will affect the source of supply of a public water system.
- d. Water used in an artificial bathing lake must be obtained from a certified public water supply or an approved source. Treated sewage effluent is not an approved source.
- e. Water clarity shall be maintained free of turbidity and shall be sufficiently clear such that a Secchi disk is visible at a depth of five (5) feet from the side of a boat in the designated swimming area.
- f. When the bacteriological, pH or water clarity standards are not met, water contact recreation shall be halted and shall not commence until written approval is obtained from the Department.

### **REGULATION 3. Approval of Plans and Construction Required**

- a. No artificial bathing lake shall be constructed, nor shall any bathing lake now or hereafter existing be materially altered or enlarged before complete plans and specifications, together with such further information as the Department may require, has been submitted to and received the written approval of the Department.
- b. Approval of artificial bathing lakes will be based upon the results of a sanitary survey of the drainage area and results of examination of bacteriological, chemical and physical quality of the water in the proposed bathing area.  
General construction plans submitted to this Department shall include, but are not limited to, the following:
  - 1. A sanitary survey of the area's watershed.
  - 2. The water circulation and dilution patterns.
  - 3. A description of the proposed activities; and
  - 4. Grading and drainage plans.Every proposed operation shall be adequately considered by a detailed study to anticipate all potential hazards of mechanical, chemical, microbiological and other relevant dangers.
- c. An application or approval of any proposed artificial bathing lake shall be made to the Department by the owner on forms furnished by the Department. Such application for approval shall accompany the plans and specifications at the time of submission to the Department for review.
- d. If any additional construction or modification of the facility shall be required, plans and specifications of the proposed facility shall be submitted for approval as required in Regulation 3, b.
- e. Plans and specifications shall be submitted to the Department at least 30 days prior to the date upon which action is desired. Plan documents submitted for approval shall include a general plot plan, plans and specifications showing the shape, dimensions, water treatment and pumping facilities, piping arrangement and sizes, source of water supply, method of disposal of wastes, together with all pertinent data upon which the design is based, including capacities of the various units, safety equipment, and other information necessary to permit a clear and full understanding of the proposed project. Detailed plans of bathhouses, dressing rooms, toilets, recreational and other bathing appurtenances shall be included.

- f. All plans specifications submitted to the Department for approval must have been prepared by, or under the supervision of, a currently Registered Arizona Professional Engineer who is licensed to practice in the State of Arizona, who shall certify that the plans comply with these Regulations.
- g. All work shall conform to approved plans and specifications. Should it be necessary or desirable to make any changes in the approved plans and specifications of the proposed work, revised plans and specifications, together with a written statement of the reasons for such change, shall be submitted to the Department for review. Approval must be obtained in writing before the work affected by the change is undertaken.
- h. The Department will, upon receipt from the applicant of reasonable advance notice of readiness therefore and of the required inspection fees, make necessary inspections to determine that the artificial bathing lake is in compliance with these Regulations. It shall be deemed acceptable only after examination and issuance of written approval by the Department.
- i. Before initial approval shall be given for the operation of an artificial bathing lake, the currently registered engineer shall certify that the completed bathing lake is constructed in accordance with the approved plans and specifications.

#### **REGULATION 4. Permit Required**

No artificial bathing lake shall be maintained or operated in Maricopa County without a permit in force issued by the Department. The permit shall be displayed in a conspicuous place on the premises where it may be readily observable by the public.

#### **REGULATION 5. Standards and Construction**

- a. Shape: The bathing shorelines shall be formed and maintained in wide curves, shall avoid sharp angles or narrow confined inlets and shall otherwise avoid any design likely to impede circulation, obstruct visibility, or create any public health or safety hazard. A supplemental means of circulation (inflow and outflow of water) shall be provided. Such supplemental circulation methods require approval by the Department.
- b. No natural or artificial projections may adjoin a bathing area, which would increase the freeboard to more than eight (8) inches.
- c. All swimming/wading and similar water contact activities shall be restricted to specified areas which shall be conspicuously marked by bright orange colored buoys delineating the other perimeter of said areas. Such buoys shall be placed at proper intervals not greater than 100 feet, be of such size to be visible at a distance of 100 feet, and be marked with large contrasting colored numerals or signs sufficient to inform users of the water depth at such buoys, and shall otherwise be sufficient to warn users and boaters of the water swimming area limits. The bottom slope of the swimming/wading areas from the shoreline to the five (5) foot depths shall be not more than one (1) foot vertical in each 12 feet horizontal. Access to swimming, bathing and wading areas shall be controlled.
- d. Bottom composition: The bottom of the swimming and wading area from the shoreline to the five (5) foot depth shall be covered with river-run rounded sand particles light in color or other approved light-colored material, and sufficiently thick to prevent abrasion of feet by rocks and to contrast a submerged bather's body against a light-colored background.

- e. Deep swimming area: Where the depth of the artificial bathing lake exceeds five (5) feet a deep swimming area may be provided. This area shall have a relatively smooth bottom and should be free from projections.  
Diving may be permitted in the deep swimming area provided that:
  - 1. Depth of water is a minimum of 12 feet;
  - 2. This depth must extend a minimum of 20 feet in front of the end of the board or diving platform;
  - 3. The diving board or diving platform must be secured to a rigid structure;
  - 4. A lifeguard must be stationed in the immediate vicinity of the diving area; and
  - 5. The diving board or diving platform height shall not exceed one (1) meter.
  - 6. The area shall be conspicuously marked by bright orange colored buoys located at the outer perimeter of said areas. Such buoys shall be placed at proper intervals of not greater than 25 feet and be of such size as to be visible from a distance of 100 feet and marked with large contrasting numerals or signs sufficient to inform users of water depth at such buoys and shall otherwise be sufficient to warn other users and boaters of the diving area limits.
  - 7. The others shall provide and maintain on file with Maricopa County a current certificate of public liability insurance evidencing minimum limits of seven million dollars (\$7 million) combined single limit for bodily injury and property damage liability. The certificate must further clearly indicate that Maricopa County is an additional insured and that no changes or modifications shall be effective in the coverage without 30 days prior notice to the offices of the Maricopa County Environmental Services Department, Division of Environmental Health.
  - 8. Slides and other similar water recreation devices must comply with the standards for diving.
- f. Artificial bathing lakes which allow power boats, jet skis, or any other vehicle or device with an internal combustion engine shall prohibit wading, swimming and bathing.
- g. Water levels in artificial bathing lakes shall be continuously maintained at the design level of plus or minus six ( $\pm 6$ ) inches.
- h. Surface drainage: Except for natural springs and streams, all surrounding surface drainage, such as from streets, gutters, and every other significant source of polluted water from the land surrounding the body of water, shall be properly diverted away from the artificial bathing lake and disposed of in such a manner so as to not create a public nuisance.

#### **REGULATION 6. Lifeguards**

- a. At least one (1) lifeguard and one (1) elevated lifeguard chair shall be provided for each 2,000 square feet of designated bathing area or 150 bathers as approved by the Department.
- b. A lifeguard safety plan shall be submitted which includes stationing and areas of responsibility. The plan shall include and consideration is given to depth, line of sight, bathing loads, training procedures, emergency procedures, lifeguard rotation, and other special conditions, which might affect the safety of the bathers. The plan must ensure the safety of bathers and be on file with the Department.
- c. Lifeguards shall be in constant attendance during bathing hours and no bathers shall be permitted in the designated swimming area(s) unless lifeguards are provided.

### **REGULATION 7. Safety Equipment**

Safety equipment shall be provided and maintained and will include, but is not limited to two (2) ring buoys, each with 50 feet of one-fourth (1/4) inch rope attached and a rescue boat. This boat shall be made available to the Department for physical standard measurements.

### **REGULATION 8. Signs**

- a. No person or entity shall allow use of any artificial bathing lake without posting prominent signs indicating, in conspicuous letters at least four (4) inches high, or as directed by the Department, the depth of the water in the bathing area and differentiating the swimming area from other recreational area(s) uses.
- b. Signs shall be posted conspicuously on all access points in conspicuous letters at least four (4) inches high, stating "WARNING, NO SWIMMING ALLOWED WITHOUT A LIFEGUARD ON DUTY" and "SWIM ONLY" in the designated bathing area(s).
- c. Signs shall be so located or constructed as to be protected from the elements.

### **REGULATION 9. Bathhouses**

The provisions of Section 5, Regulation 1 shall apply to all artificial bathing lakes, except that hot water for showers and lavatories will not be required.

### **REGULATION 10. Lighting**

It is the responsibility of the owner to ensure that all areas used for water contact recreation are adequately lighted during hours of use.