



**Queen Anne's County Health Department: Public Swimming Pools, Spas and Wading Pools
Code of Maryland Regulations (COMAR) 10.17.01
PRE-OPENING GUIDE/CHECKLIST**

ANSI REQUIRMENTS (.13) & (.14)

- Owner shall ensure aquatic venue, including a spa is in compliance with State and local codes; and
- The American National Standard for Public Swimming Pools

BARRIERS (.21)

- The top of the barrier is at least 72 inches above grade; Semi-public = 60 inches; Wading pool or infant pool = 36 inches
- The maximum clearance between at the bottom of the barrier is 4 inches
- Fence pickets have a maximum separation of 4 inches
- The barrier main access gate is located toward the shallow end of a pool
- The access gate has a latch release located at least 54 inches from grade level
- The gate is lockable
- Gate is self-closing and self-latching
- A wading pool or infant pool is separated from a pool or spa by a barrier

DECKS (.22)

- Is continuous with a minimum unobstructed width of 4 feet and an average width of 6 feet, and
- Is in conformance with the American National Standard for Public Swimming Pools
- The deck has drainage to deck drains or other points of disposal
- The deck's surface is slip resistant or nonskid
- An expansion joint between the coping and deck is sealed with a durable, watertight sealant
- The deck does not trap dirt or support or harbor algae

EQUIPMENT ROOMS (.23)

- Weathertight construction
- A minimum ceiling height of 7 feet 6 inches
- A waterproof floor that drains to a floor drain
- A lockable entrance door
- Lighting equivalent to minimum of 20 foot-candles
- Mechanical exhaust ventilation if chemicals are used or stored in the equipment room
- Natural or mechanical exhaust ventilation if chemicals are not used or stored in the equip. room
- A hose bib with an atmospheric vacuum breaker
- A water-resistant data sheet that is posted in a conspicuous place for each pool or spa

CIRCULATION SYSTEMS (.25)

- A pressure gauge on the filter or on the influent side of the filter piping and the effluent side
- Flow meter readable in gallons per minute within the range of minimum and maximum flow rate
- A thermometer on the return line to a pool or spa if the circulation system includes a heating system
- Turnover Rate: Minimum turnover rate = volume of pool in gallons/480 minutes
- Water recreational attractions and therapy: Minimum turnover rate = volume of pool in gallons/360 minutes
- Pools for wading=Volume of pool in gallons/120 minutes
- Spas: Minimum turnover rate = volume of spa/30 minutes
- The pool is not interconnected with a spa or wading pool or spray pool

CIRCULATION SYSTEM COMPONENTS (.26)

- Circulation system components are current published NSF approved
- Chemical feeder provides the minimum required disinfectant residual to the pool or spa water, and;
- Chlorine gas feeder are in compliance with the American National Standard for Public Swimming Pools
- Carbon Dioxide feeders are installed and maintained in accordance with the manufacturer's specs and;
- Secured to prevent damage to the gas cylinder if the cylinder is subject to tipping
- Ozone systems, if used, are operated and installed according to ANSI/NSF standards
- An owner shall ensure aquatic venue has a vacuum system for cleaning the pool or spa floor
- When more than 4 skimmers or a gutter system, vacuum is separate from the skimmer or gutter system
- If vacuum fittings are provided, the fittings are 1 foot below the water surface with flush removable caps
- Vacuum line connection is before the pump hair and lint strainer

DIVING AREA/EQUIPMENT (.27)

- A pool used for competitive aquatic events is in compliance with ANSI standards
- Diving equipment is installed in compliance with ANSI standards
- A starting block is located on the pool deck so that a swimmer dives into a minimum of 5 feet water depth
- Starting block is restricted from unsupervised use or is removed when not under supervised use

ENTRAPMENT PREVENTION (.28)

- A vacuum fitting is capped when not in use
- A vacuum line valve is in the closed position when not in use
- Main drain is connected to a minimum of two main drain outlets not isolated by a valve and spaced 3 feet
- A drain is covered with a securely attached drain cover in compliance with ANSI standards
- A skimmer is connected to an equalization line, main drain line, vent, or another skimmer and;
- cannot be isolated by a valve or other means
- Skimmer is provided with a vented lid
- A suction outlet is provided with an approved ANSI cover
- Suction outlet covers are in good condition, with no breaks, or other defects that could affect the structural integrity
- Suction outlet covers are secured according to manufacturers' directions and cannot be removed without the use of tools
- A pool or spa facility has a comprehensive written maintenance program
- If a suction outlet cover is cracked or broken, the pump shall be immediately shut off and the cover shall be replaced
- Lines and equipment shall be labeled or color coded for ready identification
- The on/off switch for circulation pumps shall be clearly identified and labeled
- Operator completes the Pool and Spa Entrapment Hazards Checklist on a daily basis before the pool or spa is opens for day

CHEMICAL STORAGE AREA (.29)

- Chemical storage area is protected against the weather, excess heat, and moisture
- A lockable door which can be opened from the inside
- Ventilation that is sized at 2 cfm per square foot of floor area and that exhausts to the open air
- A minimum of 20 foot-candles of illumination
- Storage for chemicals in accordance with the material safety data sheet

ILLUMINATION (.32)

- Aquatic venue used during nighttime is provided with a combination of underwater lighting and deck lighting
- Walkway lighting yielding at least 15 foot-candles of light

PLUMBING (.34)

- Water supply system and sewage disposal system comply with COMAR and local plumbing code requirements
- An owner shall ensure at least one drinking fountain for every 5,000 square feet of water surface area
- Hose bib equipped with an atmospheric vacuum breaker on the deck at 150ft intervals
- Hose bibs in the equipment room and both men and women's bathrooms with atmospheric vacuum breaker
- If installed, should be within 10 inches of a ladder or handrail or in front of a lifeguard stand; not a tripping hazard
- Aquatic venue will have backflow prevention for a potable water supply and wastewater
- An air gap that is two times the diameter of the fill spout separates the fill spout from the flood rim level of the pool or spa

EQUIPMENT INSTALLATION (.38)

- Valves, controls, gauges, filters, pumps, feeders, and other operating equipment are easily accessible
- Valves, controls, and piping are permanently numbered, labeled, or color-coded to identify their purpose or function
- Operating instructions for the circulation and water treatment systems are posted in the equipment room

MAINTENANCE (.39)

- An inspection of the pool or spa and related facilities is made at least once a week by the operator
- The pool or spa and its related facilities are maintained in a safe, clean, and orderly condition
- A broken, damaged, or malfunctioning fixture is promptly repaired or replaced

POOL SAFETY (.40)

Safety

A recreational pool is provided with:

- A first aid kit
- A face mask for CPR
- Disposable medical grade examination gloves
- A backboard designed for medical emergency use that is equipped with straps and head immobilizer
- A blood borne pathogen control kit
- A light, strong rescue pole not less than 10 feet long
- A rescue tube designed for lifesaving for each lifeguard

A semi-public pool is provided with:

- Light, strong rescue pole not less than 10 feet long
- Ring buoy with an attached throwing rope measuring 50 feet in length or 1-1/2 times the width of the pool

Telephone

- An owner shall ensure that a telephone is available within the pool or spa enclosure to individuals using a public pool or spa
- Can directly reach a 911 emergency service without the use of a coin and without connection to an internal switchboard
- Is posted with the names and phone numbers of the nearest available police, fire, and ambulance or rescue unit OR
- 911 or with any numbers necessary to reach a 911 emergency service center directly
- Is posted with the name and location of the pool or spa facility

Safety Signs

- House rules are posted at the entrance to a pool or spa
- A spa safety sign is posted in a permanent location adjacent to a spa
- A chemical warning sign is appropriately posted on storage area and includes the text "Caution! Chemical Storage Area"
- A chemical vat, feeder, pump, and line is labeled to identify the chemical in use
- A chlorine gas warning sign reading "Danger—Chlorine Gas" is posted, if applicable
- Other warning and safety signs are posted if necessary, for example, "Danger! No Diving In Shallow Water"
- A semipublic pool or public spa that does not have a lifeguard on duty has a sign posted adjacent to entrances to the pool or spa reading "WARNING; NO LIFEGUARD ON DUTY. SWIM AT YOUR OWN RISK. DO NOT SWIM ALONE. UNDER 15 SHOULD NOT USE THE POOL WITHOUT ADULT SUPERVISION."

POOL AND SPA OPERATOR (.41)

- A person may not act as or perform the duties of a public pool or spa operator without certification
- Individuals 16 years old or older will be issued a 3-year public pool and spa operator certification card
- Completed a 14-hour approved course with a minimum grade of 70 percent on an approved written examination
- Or 4 hour refresher course

DISINFECTION (.44)

Free Chlorine

- Pool = 1.5 ppm and 10.0 ppm
- Spas = 4.0 ppm and 10.0 ppm
- Wading or therapy pools = 3.0 ppm and 10.0 ppm
- The maximum amount of combined chlorine shall be 0.2 ppm for all pools and spas

Bromine

- Pool = 3.0 ppm and 8.0 ppm
- Spas, Wading and therapy pools = 4.0 ppm and 8.0 ppm

WATER CHEMISTRY (.45)

- The pH of the water is maintained between 7.2 and 7.8
- The total alkalinity of the water is maintained between 60 ppm and 180 ppm
- The calcium hardness of the water is maintained between 150 and 400 ppm
- Water temp for heated pool = 88°F
- Water temp for heated spa = 104°F
- Water temp for heated therapy pool = 96°F

TEST KITS (.47)

- A chlorine or bromine test kit that is the DPD (diethyl-p-phenylene diamine) reagent system
- A phenol red test is used to measure pH with an indicator range from at least 7.0 to 8.0
- An alkalinity titration test is used to measure alkalinity
- An EDTA (ethylenediamine-tetraacetate) hardness test is used to measure calcium hardness

WATER SANITARY QUALITY (.48)

- Owner ensures water has a coliform bacteria level of less than 1 coliform per milliliter and is free of pathogenic organisms

CHEMICAL HANDLING (.49)

- Material safety data sheet for a potentially hazardous chemical is available to the operator

CONTROL OF DISEASES (.50)

- Operator will not knowingly permit individuals with communicable diseases or diarrhea that could contaminate water

INJURY/ILLNESS REPORTS (.51)

- Operator must report and record injury, drowning, near drowning, or suction entrapment occurring at a pool or spa that results in death or that requires resuscitation or admission to a hospital within 24 hours
- A waterborne illness contracted at a pool or spa is reported within 24 hours
- A water rescue by aquatic safety personnel is reported to the Secretary every 3 months