#### PUBLIC BATHING PLACES

#### **General Provisions**

NAC 444.010 Definitions. (NRS 439.200, 444.070) As used in NAC 444.010 to 444.306, inclusive, unless the context otherwise requires, the words and terms defined in NAC 444.011 to 444.096, inclusive, have the meanings ascribed to them in those sections.

(Supplied in codification; A by Bd. of Health, 11-1-88; 10-30-97)

NAC 444.011 "Activity pool" defined. (NRS 439.200, 444.070) "Activity pool" means a water recreation attraction that has water-related activities such as rope ladders, rope swings, cargo nets and other similar activities designed primarily for bathers other than small children.

(Added to NAC by Bd. of Health, eff. 11-1-88)

**NAC 444.012 "Approved" defined.** (NRS 439.200, 444.070) "Approved" means acceptable to the health authority based upon a determination concerning conformance with appropriate standards and good public health practices.

(Added to NAC by Bd. of Health, eff. 11-1-88)

NAC 444.013 "Artificial swimming lagoon" defined. (NRS 439.200, 444.070) "Artificial swimming lagoon" means an artificial body of water with more than 20,000 square feet of water surface area that is intended to be used by persons for swimming or bathing and that is constructed with special features to imitate a natural bathing place.

(Added to NAC by Bd. of Health, eff. 11-1-88)

**NAC 444.015** "Child amusement lagoon" defined. (NRS 439.200, 444.070) "Child amusement lagoon" means a water recreation attraction that has water-related activities such as small slides, shallow pools, children washes and other similar activities designed primarily for use by small children.

(Added to NAC by Bd. of Health, eff. 11-1-88)

NAC 444.016 "Deck" defined. (NRS 439.200, 444.070) "Deck" means the area around the perimeter of a public bathing or swimming facility, adjacent to the water, that is used primarily by bathers.

(Added to NAC by Bd. of Health, eff. 11-1-88)

**NAC 444.017 "Flume" defined.** (NRS 439.200, 444.070) "Flume" means a device designed to provide a descending ride into a splash pool or slide runout at the base of a water slide. Friction on the bed of the flume is minimized in all designs by providing a flowing film of water.

(Added to NAC by Bd. of Health, eff. 11-1-88)

NAC 444.020 "Health authority" defined. (NRS 439.200, 444.070) "Health authority" means officers and agents of the Health Division or the local boards of health.

[Bd. of Health, Public Bathing Places Reg. Art. 1 § 1.2, eff. 5-21-74]

NAC 444.023 "Isolation and flotation tank" defined. (NRS 439.200, 444.070) "Isolation and flotation tank" means a tank that:

- 1. Provides a light- and sound-free environment; and
- 2. Contains a saturated solution of sodium chloride or magnesium sulfate having a specific gravity of 1.27 to 1.3 and maintained at a temperature of approximately 93.5°F (34.1°C).

(Added to NAC by Bd. of Health, eff. 11-1-88)

- **NAC 444.030 "Natural bathing place" defined.** (NRS 439.200, 444.070) "Natural bathing place" means any bathing place at a lake, pond, stream or similar body of water, together with any buildings and appurtenances:
- 1. Used by the public for bathing or swimming with the express permission of the lessee or any person responsible for the premises; or
  - 2. Openly advertised as a place for bathing or swimming by the public.

[Bd. of Health, Public Bathing Places Reg. Art. 1 § 1.3, eff. 5-21-74]

**NAC 444.040 "Normal operating level" defined.** (NRS 439.200, 444.070) "Normal operating level" means the overflow point on overflow gutters or the midpoint in the throat of the skimmers.

[Bd. of Health, Public Bathing Places Reg. Art. 1 § 1.9, eff. 5-21-74]

NAC 444.050 "Person" defined. (NRS 439.200, 444.070) "Person" includes governmental agencies.

[Bd. of Health, Public Bathing Places Reg. Art. 1 § 1.1, eff. 5-21-74]

**NAC 444.053 "Pool" defined.** (NRS 439.200, 444.070) "Pool" means any swimming pool or any structure within a public bathing or swimming facility containing an artificial body of water.

(Added to NAC by Bd. of Health, eff. 11-1-88)

NAC 444.055 "Pool enclosure" defined. (NRS 439.200, 444.070) "Pool enclosure" means the area inside of the fence or barrier surrounding a public bathing or swimming facility. [Bd. of Health, Public Bathing Places Reg. Art. 1 § 1.6, eff. 5-21-74]—(NAC A 11-1-88)

# NAC 444.058 "Public bathing or swimming facility" defined. (NRS 439.200, 444.070)

- 1. "Public bathing or swimming facility" means any:
- (a) Artificial swimming lagoon;
- (b) Isolation and flotation tank;
- (c) Mineral bath, therapeutic pool or similar facility;
- (d) Special purpose pool;
- (e) Spray pool;
- (f) Swimming pool;
- (g) Wading pool; or
- (h) Water recreation attraction,
- → that is used by the public for swimming or bathing.
- 2. The term does not include any facility at a private residence controlled by the owner of the residence, the use of which is limited to members of the family or invited guests of the owner.

(Added to NAC by Bd. of Health, eff. 11-1-88)

#### NAC 444.061 "Remodel" defined. (NRS 439.200, 444.070)

- 1. "Remodel" means to replace all or part of any structure, circulation system or appurtenance of a public bathing or swimming facility or to modify it to the extent that its design, configuration or operating characteristics differ in any respect from those of the original.
- 2. The term does not include normal maintenance and repair or the replacement of equipment that has previously been approved unless the result of the maintenance or repair is that the type, size or operating characteristics of the equipment are substantially different from those of the original.

(Added to NAC by Bd. of Health, eff. 11-1-88)

**NAC 444.064 "Slide runout" defined.** (NRS 439.200, 444.070) "Slide runout" means a shallow flume at the end of a water slide in which the bather ends his or her slide.

(Added to NAC by Bd. of Health, eff. 11-1-88)

**NAC 444.066** "Slip resistant" defined. (NRS 439.200, 444.070) "Slip resistant" means a finish or textured surface designed to prevent or reduce slipping by bare skin in contact with it under wet conditions.

(Added to NAC by Bd. of Health, eff. 11-1-88)

**NAC 444.068 "Special purpose pool" defined.** (NRS 439.200, 444.070) "Special purpose pool" means a swimming pool that is used exclusively for supervised instruction, training, therapy, treatment or competition.

(Added to NAC by Bd. of Health, eff. 11-1-88)

**NAC 444.070 "Spray pool" defined.** (NRS 439.200, 444.070) "Spray pool" means a recreation area intended for use by children, in which water is supplied by a system of sprays but is not allowed to accumulate.

[Bd. of Health, Public Bathing Places Reg. Art. 1 § 1.5, eff. 5-21-74]

#### NAC 444.075 "Swimming pool" defined. (NRS 439.200, 444.070)

- 1. "Swimming pool" means any structure containing an artificial body of water that is intended to be used collectively by persons for swimming or bathing, regardless of whether a fee is charged for its use.
  - 2. The term does not include:
- (a) Any structure at a private residence controlled by the owner of the residence, the use of which is limited to members of the family or invited guests of the owner; or
  - (b) Any other kind of public bathing or swimming facility.

(Added to NAC by Bd. of Health, eff. 11-1-88)

**NAC 444.085 "Turnover cycle" defined.** (NRS 439.200, 444.070) "Turnover cycle" means the period of time required to completely recirculate the water in a public bathing or swimming facility through its filter and treatment systems.

(Added to NAC by Bd. of Health, eff. 11-1-88)

**NAC 444.090 "Wading pool" defined.** (NRS 439.200, 444.070) "Wading pool" means a small pool to be used mainly by nonswimming children, and those supervising the children.

[Bd. of Health, Public Bathing Places Reg. Art. 1 § 1.8, eff. 5-21-74]

#### NAC 444.092 "Water recreation attraction" defined. (NRS 439.200, 444.070)

- 1. "Water recreation attraction" means any:
- (a) Activity pool;
- (b) Child amusement lagoon;
- (c) Water slide;
- (d) Watercourse ride; or
- (e) Wave pool.
- 2. The term does not include any facility at a private residence controlled by the owner of the residence, the use of which is limited to members of the family or invited guests of the owner.

(Added to NAC by Bd. of Health, eff. 11-1-88)

NAC 444.093 "Water slide" defined. (NRS 439.200, 444.070) "Water slide" means a water recreation attraction having one or more flumes.

(Added to NAC by Bd. of Health, eff. 11-1-88)

**NAC 444.094** "Watercourse ride" defined. (NRS 439.200, 444.070) "Watercourse ride" means a water recreation attraction designed to convey bathers on inner tubes or raft-like devices, using an artificially created current, along a relatively flat watercourse.

(Added to NAC by Bd. of Health, eff. 11-1-88)

**NAC 444.096 "Wave pool" defined.** (NRS 439.200, 444.070) "Wave pool" means a water recreation attraction characterized by the artificial generation of waves at one end of a pool.

(Added to NAC by Bd. of Health, eff. 11-1-88)

NAC 444.097 Severability. (NRS 439.200, 444.070) If any provision of NAC 444.010 to 444.306, inclusive, is declared unconstitutional or invalid for any reason, the remainder of the provisions of those sections are not intended to be affected thereby.

[Bd. of Health, Public Bathing Places Reg. Art. 48, eff. 5-21-74]—(NAC A 11-1-88)

#### **Preliminary Requirements**

#### NAC 444.100 Application; plans and specifications. (NRS 439.200, 444.070, 444.080)

- 1. Any person desiring to construct a public bathing or swimming facility or to remodel or add to an existing facility must apply in writing to the health authority on forms furnished by the health authority, giving the name of the facility and its location together with such other information as may be required. The application must be accompanied by plans and specifications with supporting data prepared by a professional engineer who is registered in this State, an architect who is registered in this State, or a licensed contractor who holds a classification A license with an A-10 subclassification issued by the State Contractors' Board. A licensed professional engineer or a registered architect shall include his or her seal and signature on any plans and specifications submitted to the health authority. A licensed contractor shall include his or her signature on any plans and specifications submitted to the health authority.
- 2. The plans must be drawn to scale, contain a north arrow and must be accompanied by proper specifications so as to permit a comprehensive engineering review of the plans. The plans must include:
  - (a) Plan and sectional views with all necessary dimensions of the facility.

- (b) A piping diagram showing all appurtenances including treatment facilities in sufficient detail, as well as pertinent elevation data, to permit a hydraulic analysis of the system.
- (c) Details on all treatment equipment, including catalog identification. If mechanical equipment is specified by the use of a trade name or catalog numbers, individual leaflets, catalogs or other descriptive material must be furnished. This material will be returned to the applicant on his or her request after the review of the plans.
- (d) An electrical diagram showing the method of grounding, junction boxes and other pertinent details.
- (e) Detailed plans of bathhouses, equipment rooms, dressing rooms, toilet facilities, showers and other appurtenances.
- 3. The plans and specifications must be submitted in triplicate. Additional copies must be submitted if requested.
- 4. The submitted plans must be approved in writing before any construction is undertaken. [Bd. of Health, Public Bathing Places Reg. Art. 2 §§ 2.1-2.1.5.5, eff. 5-21-74]—(NAC A 11-1-88; 1-16-96)

# NAC 444.102 Changes in plans; structural adequacy. (NRS 439.200, 444.070, 444.080)

- 1. The facility must be built in accordance with the plans as approved, unless prior approval of the changes has been given in writing by the health authority.
- 2. The review of the plans by the health authority will not include a review of the structural design or structural stability of any section or part of the facility. Certification of structural adequacy is the responsibility of the architect or a qualified professional engineer who is licensed by the State Board of Registered Professional Engineers and Land Surveyors.

[Bd. of Health, Public Bathing Places Reg. Art. 2 §§ 2.2 & 2.2.3, eff. 5-21-74]—(NAC A 11-1-88)

#### NAC 444.104 Inspections. (NRS 439.200, 444.070, 444.090)

- 1. The owner or his or her agent shall notify the health authority at specific predetermined stages of construction and at the time of completion of the facility, to permit inspection of the facility during and after construction.
- 2. In areas where the health authority cannot provide the inspections and where the local government does not require building inspections, the owner or his or her agent may be required to hire a third party inspector. The third party inspector may be selected by the owner or his or her agent upon the approval of the Health Division.
- 3. The facility may not be placed in operation until the inspection shows compliance with the requirements of NAC 444.010 to 444.306, inclusive.

[Bd. of Health, Public Bathing Places Reg. Art. 2 §§ 2.2.1 & 2.2.2, eff. 5-21-74]—(NAC A 11-1-88)

#### **General Standards for Construction**

NAC 444.108 Use of equipment and materials not designated by NSF International. (NRS 439.200, 444.070) The health authority may permit the use of equipment and materials which are not designated by the NSF International as complying with the standards adopted pursuant to NAC 444.010 to 444.306, inclusive, if the health authority determines that the equipment and materials comply with standards equivalent to the NSF International Standards.

(Added to NAC by Bd. of Health, eff. 1-16-96)

**NAC 444.110 Location.** (NRS 439.200, 444.070) A pool must be located where it will not be exposed to undesirable substances or surface drainage from surrounding areas.

[Bd. of Health, Public Bathing Places Reg. Art. 6, eff. 5-21-74]—(NAC A 11-1-88)

## NAC 444.112 Shape. (NRS 439.200, 444.070)

- 1. The shape of any pool must be such that the circulation of pool water and supervision of swimmers are not impaired.
- 2. There must be no obstruction extending from the wall or the floor, extending into the clear area of the diving portion.
  - 3. The use of solid barriers or fences between the various depths is prohibited. [Bd. of Health, Public Bathing Places Reg. Art. 8, eff. 5-21-74]

#### NAC 444.114 Side walls and bottoms. (NRS 439.200, 444.070)

- 1. The side walls and bottoms of all pools must be constructed of materials which are inert, nontoxic to humans, impervious, permanent and enduring and which can withstand the anticipated loading for empty and full conditions.
- 2. Pools must be constructed of concrete or other impervious and structurally rigid materials with a finish adapted to the bathing demands of different areas of the pools. All side walls and bottom surfaces must be watertight, free from structural cracks, and have a slip-resistant finish which is smooth and easily cleanable. Floors and walls below the gutter and 6-inch tile line must be white or light pastel in color and must reflect any natural or artificial light.
- 3. Any design incorporated into the construction of a pool or painted on the floor or walls must not prevent the detection of algae, sediment, a human in distress or other objects in the pool. Permission in writing from the health authority for the use of a design must be obtained before the design is used.
- 4. All corners formed by the intersection of walls and floors must be covered. Painting of new pools is not recommended.
- 5. Provision must be made for the relief of pressures which might occur as a result of unbalanced exterior hydrostatic pressures, or means must be provided for positive and continuous drainage from under the pool floor and around the pool walls wherever groundwater is present.
- 6. Provision must be made to protect the pool structure from both internal and external stresses which may develop due to freezing.

[Bd. of Health, Public Bathing Places Reg. Art. 7, eff. 5-21-74]—(NAC A 11-1-88)

## NAC 444.116 Limitations on depth; signs prohibiting diving. (NRS 439.200, 444.070)

- 1. Every swimming pool must have a minimum depth in the shallow area of the main swimming pool area of not less than 3 feet (0.9 meter) or more than 3 feet 6 inches (1.1 meters) from the normal operating level to the floor. Exceptions may be made for special purpose pools, or in a recessed area of the main swimming pool where the pool is of an irregular shape such as the leg of a T, L or Z, separated from the main pool by a lifeline.
- 2. If steps extend for more than one-half the width of the shallow portion of the pool, the depth of water at the base of the lowest step must not be greater than 3 feet 6 inches (1.1 meters).
- 3. The side walls of the pool must be vertical at all points for a depth of not less than 2 feet 6 inches (0.8 meter).
- 4. If a pool is not designed for diving, a sign stating "NO DIVING," in contrasting characters of not less than 4 inches (10.16 centimeters) in height, must be posted.

## NAC 444.118 Marking depth. (NRS 439.200, 444.070)

- 1. The depth of the water in a pool must be plainly marked in units of feet at or above the water surface on the vertical pool wall at maximum and minimum points and at the points of break between the deep and shallow portions and at intermediate increments of depth, spaced at not more than 25-foot (7.6-meter) intervals.
- 2. Depth markers must be in numerals not less than 4 inches (10 centimeters) in height and of a color contrasting with the background. Markers must be on both sides and at the ends of the pool.
- 3. The markings must be plainly visible to persons in the pool and to persons about to enter the water.

[Bd. of Health, Public Bathing Places Reg. Art. 12, eff. 5-21-74]—(NAC A 11-1-88)

## NAC 444.120 Slope. (NRS 439.200, 444.070)

- 1. Except as otherwise provided in <u>NAC 444.1958</u>, the floor slope in a pool must not be steeper than:
  - (a) One in 12 in the shallow end; or
  - (b) One in 3 in the deep end.
- 2. The slope must be uniform, and the bottom surface must be smooth but must have a slip-resistant finish.
  - 3. All portions of the pool bottom must have a definite slope toward the pool drains.
- 4. Except as otherwise provided in <u>NAC 444.1958</u>, the depth at the slope break must be 5 feet (1.5 meters). An exception may be made permitting the breakpoint to occur at a minimum of 4 feet 6 inches (1.4 meters) for pools less than 60 feet (18.3 meters).

[Bd. of Health, Public Bathing Places Reg. Art. 10, eff. 5-21-74]—(NAC A 11-1-88)

#### NAC 444.122 Diving area and equipment. (NRS 439.200, 444.070)

- 1. In a pool in which diving and swimming are allowed, the area of the pool in which diving is permitted must be:
- (a) In the case of a rectangular pool, at one end of the pool which is separated from the main swimming area by a lifeline.
- (b) In the case of a T, L or Z shaped pool, in a recessed area forming one of the legs of the T, L or Z which is separated from the main swimming area by a lifeline.
- → A pool designed only for diving may be located in an area which is separate from a pool designed for swimming.
- 2. A pool for which an operating permit is issued before January 16, 1996, and in which diving is allowed must contain an adequate area and a depth of water to provide safe diving. A pool for which an operating permit is issued on or after January 16, 1996, and in which diving is allowed must contain an area and depth of water that complies with Article IV of the *American National Standard for Swimming Pools: ANSI/NSPI-1 1991*, which is hereby adopted by reference. A copy of the article may be obtained from the National Spa and Pool Institute, 2111 Eisenhower Avenue, Alexandria, Virginia 22314, at a cost of \$32.
- 3. Diving boards, towers and platforms in excess of 3 meters in height are not allowed in a pool without special provisions, controls and definite limitations on their use. Where such boards, towers or platforms are permitted, their use must be limited to adequately trained personnel and must not be open to the general public.

- 4. Diving boards, towers and platforms must have a slip-resistant finish and, if covered with an absorbent material, the cover must be disinfected daily.
- 5. At least 16 feet (4.9 meters) of unobstructed clearance must be provided above diving boards and platforms.
- 6. Supports, platforms and steps for diving boards must be of substantial construction and of sufficient structural strength to carry the maximum anticipated loads safely. Steps must be of corrosion resistant material, easily cleanable and of slip-resistant design.
- 7. Handrails must be provided at all steps and ladders leading to diving boards more than 1 meter above the water, except those ladders set at 15° or less from the vertical. Platforms and diving boards which are over 1 meter high must be protected with guard railings.

[Bd. of Health, Public Bathing Places Reg. Art. 13, eff. 5-21-74]—(NAC A 11-1-88; 9-16-92; 1-16-96)

# NAC 444.126 Lifelines. (NRS 439.200, 444.070)

- 1. Devices for fastening lifelines must be installed at least 2 feet (0.6 meter) toward the shallow end from the break in grade between the shallow portion and the deep portion of a pool. These devices must be securely anchored, of corrosion resistant material and of a type which will be recessed or have no hazardous projection.
  - 2. A lifeline with floats must be installed if required by the health authority. [Bd. of Health, Public Bathing Places Reg. Art. 11, eff. 5-21-74]—(NAC A 11-1-88)

## NAC 444.128 Ladders and stairs. (NRS 439.200, 444.070)

- 1. Stairs or ladders must be provided at the shallow portion of a pool if the vertical distance from the bottom of the pool to the deck or walk is over 2 feet (0.6 meter). Stairs or ladders must be provided at the deep portion of the pool. If the pool is over 30 feet (9.1 meters) wide, such stairs or ladders must be provided at each side of the deep portion of the pool.
- 2. A minimum of one ladder must be provided for each 75 feet (22.3 meters) of perimeter and not less than two ladders must be provided at any pool. Where stairs are provided in a pool, one ladder may be deleted for each set of stairs provided.
  - 3. Pool ladders must be corrosion resistant and must be equipped with slip-resistant treads.
- 4. If stepholes are provided, they must be of such design that they may be readily cleaned and must drain into the pool to prevent accumulation of dirt. Stepholes must have a minimum tread of 5 inches (13 centimeters) and a minimum width of 14 inches (36 centimeters).
- 5. A side handrail extending up above and returning to the horizontal surface of the pool deck, curb, or coping must be provided at each side of each ladder or set of stepholes. There must be a clearance of not more than 5 inches (13 centimeters) or less than 3 inches (9 centimeters) between the ladder and the pool wall.
- 6. Stairs leading into the pool must be of slip-resistant design, have a minimum tread of 12 inches (30 centimeters), and a maximum rise of 10 inches (25 centimeters). The edge of the stair tread must be constructed of a material so colored as to contrast with the color of the stairs and be clearly visible and evident to bathers.
- 7. All stairs entering a pool must be recessed into the walls of the pool and a guardrail must be provided in the walkway around the stairwell. An exception to this will permit the construction of steps at the shallow end of the pool. An approved handrail must be provided for each set of stairs.

[Bd. of Health, Public Bathing Places Reg. Art. 14, eff. 5-21-74]—(NAC A 11-1-88)

## NAC 444.130 Handholds. (NRS 439.200, 444.070)

- 1. Every pool must be provided with a handhold around the entire perimeter of the pool, such as a perimeter overflow system, bull-nosed coping or cantilevered decking, installed not more than 9 inches (22.86 centimeters) above the waterline.
- 2. For special purpose pools used for instruction or competitive swimming, a handhold at water level similar to the rim of a perimeter overflow system is required.
- 3. If a perimeter overflow system is not provided, bull-nosed coping, cantilevered decking of reinforced concrete or material equivalent in strength and durability must be provided. The coping, decking or other material must have rounded, slip-resistant edges, and must not exceed 3 1/2 inches (8.89 centimeters) in thickness. The overhang of the coping, decking or other material must not exceed 2 inches (5.08 centimeters) nor be less than 1 inch (2.54 centimeters).

[Bd. of Health, Public Bathing Places Reg. Art. 18, eff. 5-21-74]—(NAC A 11-1-88)

#### NAC 444.132 Chairs for lifeguards. (NRS 439.200, 444.070)

- 1. Each pool must have at least one elevated lifeguard chair. This shall be presumed to be adequate for 2,000 square feet (185.8 square meters) of pool surface area with an additional lifeguard chair being provided for each additional area of 2,000 square feet (185.8 square meters) or major fraction thereof.
- 2. If a pool is provided with more than one lifeguard chair and the pool width is 40 feet (12.2 meters) or more, chairs must be located on each side of the pool.
- 3. The chairs must be located to provide a clear, unobstructed view of the bottom of the pool in the area of surveillance.
- 4. The requirements of this section may be waived by the health authority in the case of a swimming pool serving a motel, apartment or hotel and having a surface area of less than 2,000 square feet (185.8 square meters).
- 5. Lifeguard stations may be substituted for lifeguard chairs with written approval of the health authority.

[Bd. of Health, Public Bathing Places Reg. Art. 36, eff. 5-21-74]—(NAC A 11-1-88)

#### NAC 444.133 Innovative designs; bridges and walkways. (NRS 439.200, 444.070)

- 1. An innovative swimming pool design or a bridge or walkway over a pool must not endanger the health or safety of bathers or contribute contamination of any kind to the water in the pool.
  - 2. Any such bridge or walkway must:
- (a) Be not less than 8 feet (2.4 meters) above the bottom of the pool and not less than 4 feet (1.2 meters) above the surface of the water in the pool;
- (b) Have a slip-resistant surface which can be cleaned by hosing and will cause no discomfort to bare feet; and
- (c) Be perpendicular to the edge of the pool at any point where it meets the edge or, if the edge is curved at the point of intersection, to a tangent passing through that point.

(Added to NAC by Bd. of Health, eff. 11-1-88)

#### NAC 444.134 Decks. (NRS 439.200, 444.070)

1. Except as otherwise provided in this subsection and in <u>NAC 444.196</u> and <u>444.1995</u>, a clear, unobstructed deck must be provided around the entire perimeter of a pool. In no case may the width of the deck be less than 4 feet (1.2 meters). A deck may be obstructed for a distance equal to not more than 10 percent of the perimeter of the pool if:

- (a) The design of the obstruction does not endanger the health or safety of persons using the pool;
- (b) An unobstructed area of deck not less than 4 feet wide is provided around or through the obstruction not more than 15 feet (4.55 meters) from the edge of the pool; and
- (c) Written approval for the obstruction is obtained from the health authority before construction or installation of the obstruction.
- 2. The paved area of the deck must extend not less than 4 feet (1.2 meters) from both sides and rear of any diving board or its appurtenances.
- 3. The surface of the paved deck must not drain into the pool or the overflow gutter. Drainage must be conducted from the deck in a manner that will not create muddy, hazardous or objectionable conditions. Decks must slope on a minimum slope of 1/4 inch per foot (2 percent) to the drains to points at which the water will have a free, unobstructed flow to points of disposal at all times. If deck drains are provided, they must be spaced or arranged so that not more than 400 square feet (37.2 square meters) of area is tributary to each drain and drains must not be more than 25 feet (7.6 meters) apart. Drainage from the decks must not be returned to the recirculation system.
- 4. The deck must have a slip-resistant surface that can be cleaned by hosing and causes no discomfort to bare feet.
- 5. Provision must be made to prevent the drainage of materials from lawns or landscaped areas onto the pool decks or into the pool.

[Bd. of Health, Public Bathing Places Reg. Art. 15, eff. 5-21-74]—(NAC A 11-1-88)

NAC 444.135 Use of manufactured products to resist slipping. (NRS 439.200, 444.070) A manufactured product may not be used at a public bathing or swimming facility or natural bathing place to provide a slip-resistant finish or surface unless it is intended by the manufacturer to provide resistance to slipping under wet conditions.

(Added to NAC by Bd. of Health, eff. 11-1-88)

#### NAC 444.136 Barriers; exclusion of unauthorized persons. (NRS 439.200, 444.070)

- 1. Provision must be made to exclude unauthorized persons from any pool or pool area. A pool must be surrounded by a fence, wall, building or other barrier that completely encloses the pool area and otherwise complies with the requirements of this section. No part of a pool enclosure may be used for common foot traffic.
- 2. The barrier must be impenetrable for small children and must not offer any external handholds or footholds.
- 3. In the case of a swimming pool operated solely for and in conjunction with a hotel, motel or other place of lodging, or a trailer park, apartment, condominium or other facility containing multiple dwellings, the barrier must be not less than 5 feet (1.5 meters) in height. Courtyard-type concepts in which gates or doors open directly into a pool enclosure from a dwelling unit or hotel or motel room are not permitted. In any other case, the barrier must be not less than 6 feet (1.8 meters) in height.
- 4. Any vertical members in the barrier must not be more than 4 inches (10.16 centimeters) apart.
- 5. Any opening at the bottom of the barrier must not be more than 4 inches (10.16 centimeters) in height.
  - 6. Any gate or door that opens into the pool area:

- (a) Must be equipped with permanent locking devices and self-closing and positive self-latching mechanisms. Self-closing and self-latching mechanisms must be located not less than 3 1/2 feet above the ground.
  - (b) Must self-close and positively self-latch from any open position.
  - (c) Must not be blocked open or otherwise disabled to prevent closing and latching.
  - (d) Must, in the case of an indoor pool, be made of metal and installed in a metal frame.
- The operator of the pool shall periodically inspect each such gate or door to ensure that it is operating properly.
- 7. Facilities, such as large resort hotels, which have continuous, 24-hour-a-day security of the pool area may be exempt from the requirements of this section.
- 8. Where existing construction prohibits compliance with the requirements of this section, the owner shall file with the health authority an operation procedure which will serve to ensure the exclusion of unattended small children from the pool.

[Bd. of Health, Public Bathing Places Reg. Art. 16, eff. 5-21-74]—(NAC A 11-1-88)

**NAC 444.138 Hose bibs.** (NRS 439.200, 444.070) Hose bibs must be provided in locations where necessary to enable thorough hosing down of all walks, floors and appurtenances. They must be located so they do not constitute a safety hazard.

[Bd. of Health, Public Bathing Places Reg. Art. 17, eff. 5-21-74]

#### NAC 444.140 Electrical requirements. (NRS 439.200, 444.070)

- 1. All new electrical wiring in a public bathing or swimming facility must conform with the 1987 edition of the *National Electric Code* of the National Fire Protection Association and applicable state and local building codes. A copy of the *Code* may be obtained from the International Conference of Building Officials, 5360 South Workman Mill Road, Whittier, California 90601, at a cost of \$20.50. All equipment, fixtures and wiring must bear an appropriate label issued by Underwriters Laboratories Inc., or an equivalent organization.
- 2. All electrical devices such as portable announcing systems, radios and soft drink dispensers that might be around the pool deck and immediate environment must not be within the reach of bathers.
- 3. Ground fault circuit interrupters must be provided on all new facilities in accordance with the 1987 edition of the *National Electric Code* for all lighting circuits as well as for motors and other electrical circuits in the area of any pool. These devices are required on an existing facility if the health authority determines it is necessary to protect the safety of bathers.

[Bd. of Health, Public Bathing Places Reg. Art. 32, eff. 5-21-74]—(NAC A 11-1-88)

# NAC 444.142 Lighting. (NRS 439.200, 444.070)

- 1. Artificial lighting must be provided for all public bathing or swimming facilities, natural bathing places, bathhouses, toilet rooms, dressing rooms, and equipment rooms that are to be used at night or that do not have adequate natural lighting.
- 2. Pools designed and maintained for use at night must be equipped with lighting designed and spaced so that all parts of the pool, including the bottom, may be readily seen without glare.
- 3. The lighting system for outdoor pools must be designed with sources of illumination located so as to prevent insects attracted by the lights from falling into the water.
- 4. Where underwater lighting is used, not less than 0.5 watts (10 lamp lumens) must be employed per square foot (.093 square meter) of water surface area.
  - 5. If bathing or swimming at night is permitted and underwater lighting:

- (a) Is used, area lighting must be directed toward deck areas to the extent practical and not less than 0.6 watts must be employed per square foot (.093 square meter) of deck area.
- (b) Is not used, area and pool lighting must be provided and not less than 2.0 watts must be employed per square foot (.093 square meter) of deck area.
- 6. The lenses of pool lights must be clear so that the inside of the light is visible during inspection.
- 7. If lighting is not provided as required by this section, the operator of the facility or natural bathing place:
  - (a) Shall not permit any use of the facility or bathing place after dark.
- (b) Shall post a sign stating "NO SWIMMING, BATHING OR OTHER USE OF FACILITY ALLOWED AFTER DARK," in contrasting characters not less than 4 inches (10.16 centimeters) in height, near each entrance to the facility or bathing place.

[Bd. of Health, Public Bathing Places Reg. Art. 31, eff. 5-21-74]—(NAC A 11-1-88)

**NAC 444.144 Acoustics.** (NRS 439.200, 444.070) All indoor pool enclosures must receive acoustical treatment which will prevent reverberations of sound that may result in lack of control on the part of the lifeguards or instructors.

[Bd. of Health, Public Bathing Places Reg. Art. 34, eff. 5-21-74]—(NAC A 11-1-88)

## NAC 444.146 Connections for supply and disposal of water. (NRS 439.200, 444.070)

- 1. No direct mechanical connection with a domestic water supply may be made to a public bathing or swimming facility, a chlorinator or the system of piping for the facility, unless it is protected against backflow in a manner approved by the health authority. All pools must be equipped with acceptable provisions, such as overfall fillspouts, surge tanks or receptors, for adding makeup water.
- 2. Water used to fill any pool must be supplied by an overfall fillspout providing an airgap of not less than 6 inches (15 centimeters) between the flood level at the pool and the lowest point of the fillspout, or an overfall supply to a surge tank or receptor wherein the water will freely overflow at deck level or the top of the surge tank or receptor before coming in contact with the water supply outlet.
- 3. Sanitary sewage from the bathhouse must be discharged into a sewage system approved by the health authority.

[Bd. of Health, Public Bathing Places Reg. Art. 24, eff. 5-21-74]—(NAC A 7-23-82; 11-1-88)

#### NAC 444.148 Quality of water. (NRS 439.200, 444.070)

- 1. Water entering a public bathing or swimming facility for the first time must meet the bacteriological standards for potable water set forth in the primary drinking water standards adopted pursuant to NRS 445A.855, except the health authority may approve the use of water from natural sources including saline water. Fresh water must be added to pools that depend upon the flow of a stream, lake, well or other source which has been diverted to flow in and out of the pool, at a rate of not less than 1,000 gallons (378.5 liters) per hour for each 20 bathers using the pool during each hour.
- 2. All public bathing or swimming facilities must have a uniform flow-through of water in the volume and quality described in subsection 1, or recirculation and filtration equipment provided for water purification in accordance with the requirements of <u>NAC 444.010</u> to <u>444.306</u>, inclusive.
  - 3. The equipment must provide water which meets the following standards:

- (a) The water must be continuously disinfected by a chemical which imparts an easily measured, freely available residual effect. Except as otherwise provided in <u>NAC 444.207</u>, adequate disinfection must be accomplished by one of the following:
  - (1) Normal chlorination of 1.0 to 5.0 ppm chlorine at pH 7.0 to 8.0;
  - (2) Chlorinated cyanurate chlorination of 1.0 to 5.0 ppm at pH 7.2 to 8.0; or
  - (3) Normal bromination of 3.0 to 5.0 ppm at pH 7.0 to 8.0.
- (b) The health authority may accept other disinfecting materials or methods if they have been adequately demonstrated to provide a satisfactory residual effect which is easily measured, and otherwise to be equally as effective under conditions of use as the chlorine concentration required in this section.
  - (c) The maximum permissible concentration of cyanuric acid is 100 ppm.
  - (d) The total alkalinity should be within the range of 80 to 120 ppm.
- 4. The chemical quality of water used in the facility must not cause irritation to the eyes or skin of the bathers, or have other objectionable physiological effects on bathers.
- 5. The water must have sufficient clarity at all times so that the pattern of the main drain in any pool is clearly visible from the walk at the deep end. Failure to meet this requirement constitutes a ground for the immediate closing of the facility.
- [Bd. of Health, Public Bathing Places Reg. Art. 20 §§ 20.1-20.5, eff. 5-21-74]—(NAC A 7-23-82; 11-1-88)

#### NAC 444.150 Sampling of water. (NRS 439.200, 444.070)

- 1. Samples of water from each public bathing or swimming facility must be submitted to the laboratory of the Health Division once a week for bacteriological testing. This requirement may be waived for facilities maintaining approved operating records and having dependable disinfection and filtration.
  - 2. Not more than 15 percent of the samples must either:
- (a) Contain more than 200 bacteria per milliliter, as determined by the standard (35°C) agar plate count; or
- (b) Show positive test (confirmed test) for coliform organisms in any of the five 10 milliliter portions of a sample or more than 1.0 coliform organisms per 50 milliliter if the membrane filter test is used.
- 3. All samples must be collected, dechlorinated and examined in accordance with the procedures outlined in the latest edition of *Standard Methods for the Examination of Water and Wastewater* (APHA).
- [Bd. of Health, Public Bathing Places Reg. Art. 20 §§ 20.6 & 20.6.1, eff. 5-21-74]—(NAC A 11-1-88)

#### NAC 444.152 System for recirculation. (NRS 439.200, 444.070)

- 1. Except as otherwise provided in <u>NAC 444.198</u> to <u>444.1995</u>, inclusive, and <u>444.202</u>, a recirculation system, consisting of pumps, filters, water conditioning, disinfection equipment and other accessory equipment, must be provided at each public bathing or swimming facility which will recirculate, clarify and disinfect the volume of water used in the facility every 6 hours or less.
- 2. The patterns of recirculation developed in any pool must be partial flow through the main drain and the remainder through the overflow gutters or skimmers.

- 3. The recirculation system must include a vacuum gauge located on or immediately before the pump on the suction side of the system and a pressure gauge immediately after the pump on the pressure side of the system.
- 4. The recirculation system must be operated at all times the facility is open for use and for not less than 3 hours after the facility is closed. If the system is shut down for periodic maintenance and repair, no person who is not an employee of the facility may be allowed into the facility.
  - 5. If time clocks are used to govern the operation of the recirculation system, they must be:
- (a) Used to govern the operation of any equipment, such as chemical disinfectant feeders, slurry feeders or heaters, dependent upon the flow of water within the system.
  - (b) Reset immediately after any interruption in power.
- [Bd. of Health, Public Bathing Places Reg. Art. 26 §§ 26.1 & 26.2, eff. 5-21-74]—(NAC A 11-1-88)
- **NAC 444.154 Rate of flow.** (NRS 439.200, 444.070) An adequate number of rate of flow indicators and rate of flow controllers having satisfactory range must be installed and properly located, so that the rate of flow either during normal circulation or during the filter backwashing operation can be determined.

[Bd. of Health, Public Bathing Places Reg. Art. 26 § 26.6, eff. 5-21-74]

## NAC 444.156 Inlets. (NRS 439.200, 444.070)

- 1. Except as otherwise provided in this subsection, inlets must be rounded and smooth and installed not less than 18 inches (46 centimeters) below the normal operating level and located to produce a uniform circulation, without the existence of dead spots. In the case of a shallow pool, an exception to this requirement may be granted by the health authority if inlets cannot be installed at the depth otherwise required.
  - 2. Inlets must not extend from the pool wall or floor so as to create a hazard.
  - 3. Each set of stairs must have an inlet to provide good circulation over the stairs.
- 4. Except as otherwise provided in subsection 6, if wall inlets are used, the distance between adjacent inlets must not exceed 15 feet (4.6 meters).
- 5. Except as otherwise provided in this subsection, any pool having a width greater than 40 feet (12.19 meters) must have floor inlets meeting the requirements of this subsection or a combination of wall and floor units meeting the requirements of subsection 4 and this section. If floor inlets are used:
- (a) They must be located so that they provide general circulation and not direct flow to floor drains; and
  - (b) The distance between:
    - (1) Adjacent floor inlets must not exceed 15 feet.
    - (2) Floor units and the nearest wall must not exceed 10 feet.
- 6. Except as otherwise provided in subsection 5 and notwithstanding the provisions of subsection 4, any combination of wall and floor units may be used if it is shown to produce a uniform circulation.
- [Bd. of Health, Public Bathing Places Reg. Art. 26 §§ 26.11-26.11.3, eff. 5-21-74]—(NAC A 7-23-82; 11-1-88)

- 1. All pools must be provided with a main drain at the lowest point of the floor of the pool to permit the pool to be completely and easily drained.
  - 2. The distance of each main drain from:
  - (a) The nearest main drain must not exceed 20 feet (6.1 meters) on the centers.
  - (b) Any side wall must not exceed 15 feet (4.6 meters).
- 3. The sump of each main drain must be covered with a suitable protective cover or grate securely fastened in such a way that it cannot be removed without the use of tools. The openings in the grate must not exceed 1/2 inch (1.27 centimeters) in diameter. Except as otherwise provided in this subsection, the velocity of water through the grate must not exceed 1.5 feet per second. If only one main drain in the pool is connected to a pump:
  - (a) The drain must be of antivortex design.
  - (b) The velocity of water through the grate must not exceed 6 feet per second.
- 4. The recirculation system must be designed to guard against outlet entrapment. Any of the following means may be employed:
- (a) The system must include no fewer than two main drains, separated by not less than 4 feet (1.22 meters), and connected to pipes of equal diameter. The system must not permit any cutoff of either drain from the suction line.
- (b) The system must include one or more antivortex outlet drains. Any drain installed at a depth of 4 1/2 feet (1.37 meters) or less must not present a tripping hazard to the bather.
  - (c) Any other system, approved by the health authority, that guards against outlet entrapment.
- 5. Valves or pumps used for draining pools must be sized to prevent the surcharging of the receiving drain. Multiport valves must:
- (a) Comply with all applicable requirements of Standard 50 of the National Sanitation Foundation. A copy of this standard may be obtained from the National Sanitation Foundation, P.O. Box 1468, Ann Arbor, Michigan 48106, at a cost of \$8.
  - (b) In the absence of an applicable standard, be approved by the health authority.
  - 6. The main drains must be capable of taking at least 50 percent of the circulated flow.
  - 7. As used in this section:
- (a) "Antivortex drain" means a drain having a raised cover designed to prevent or minimize any suctioning effect on a person that comes into contact with the drain.
- (b) "Multiport valve" means a separate switching valve that has a separate position for each of the various filter operations and that combines in one unit the functions of two or more direct-flow valves.
- [Bd. of Health, Public Bathing Places Reg. Art. 26 §§ 26.7-26.7.4, eff. 5-21-74]—(NAC A 9-17-82; 11-1-88)

# NAC 444.160 Piping. (NRS 439.200, 444.070)

- 1. The water velocity in the piping of a public bathing or swimming facility must not exceed 10 feet (3 meters) per second for discharge piping, except that the velocity for copper pipe must not exceed 6 feet (1.8 meters) per second. Suction velocity for piping must not exceed 6 feet (1.8 meters) per second for both. If velocities exceed these rates, summary calculations must be provided to show that rated flows are possible with the pump and piping provided.
- 2. Piping must be of a nontoxic material, resistant to corrosion and able to withstand operating pressures. All plastic piping and fittings used in the recirculation system must be imprinted with the name of the manufacturer and the potable water mark of the National Sanitation Foundation, or its equivalent, and must:

- (a) Comply with all applicable requirements of Standard 14 for potable water applications of the National Sanitation Foundation. A copy of this standard may be obtained from the National Sanitation Foundation, P.O. Box 1468, Ann Arbor, Michigan 48106, at a cost of \$9.
  - (b) In the absence of an applicable standard, be approved by the health authority.
  - 3. Pipes must be identified by color code or tags.
- 4. All piping must be supported on piers or other substantial means to prevent possible settlement which will either provide dirt traps or air pockets.
- 5. All pressure and suction lines must have a uniform slope in one direction of not less than 3 inches per 100 feet (0.25 percent). Gravity waste lines around any pool 6 inches (15 centimeters) or smaller must have a minimum slope of one-quarter of an inch per foot (2 percent). Lines larger than 6 inches (15 centimeters) and all outfall main lines must be designed with a size of pipe and slope to carry freely the maximum flows.

[Bd. of Health, Public Bathing Places Reg. Art. 26 §§ 26.3-26.3.4, eff. 5-21-74]—(NAC A 7-23-82; 11-1-88)

#### NAC 444.162 Pumps and motors. (NRS 439.200, 444.070)

- 1. A pump and motor unit must be provided for the recirculation of water which has been selected for performance and will meet the conditions of quantity required for filtering and cleaning the filters with the total dynamic head developed by the complete system.
- 2. The requirements for filtration must be based upon the maximum head loss developed immediately before washing the filters.
- 3. The motor must be nonoverloading in continuous operation for filtration under all conditions, but may be overloaded within the service factor for conditions of backwash and for emptying any pool.
- 4. A pump performance curve for the unit to be installed must be provided with the plans submitted for approval.
  - 5. A pump used in a recirculation system must:
- (a) Comply with all applicable requirements of Standard 50 of the National Sanitation Foundation. A copy of this standard may be obtained from the National Sanitation Foundation, P.O. Box 1468, Ann Arbor, Michigan 48106, at a cost of \$8.
  - (b) In the absence of an applicable standard, be approved by the health authority.

[Bd. of Health, Public Bathing Places Reg. Art. 26 § 26.4, eff. 5-21-74]—(NAC A 11-1-88)

**NAC 444.164 Arrangements for overflow.** (NRS 439.200, 444.070) Every pool must be provided with overflow gutters or skimmers. Other kinds of overflow arrangements and pool edges, including deck level pools, may be installed if approved by the health authority. No such pool may be installed or built if a safety hazard may result.

[Bd. of Health, Public Bathing Places Reg. Art. 26 § 26.8, eff. 5-21-74]—(NAC A 11-1-88)

# NAC 444.166 Gutters. (NRS 439.200, 444.070)

- 1. Except as otherwise provided in <u>NAC 444.1968</u>, the overflow gutter around any pool must be continuous around the pool except at stairs or recessed ladders.
- 2. The overflow gutter may also serve as a handhold. The overflow edge must be rounded and must not be thicker than 2 1/2 inches (6 centimeters) for the top 2 inches (5 centimeters).
- 3. The gutter lip must be smooth and uniform and at a precise level in a horizontal plane so far as is practical within the limits of craftsmanship.

- 4. The pool water level must be maintained about an inch below the gutter during periods of pool use. During daily cleanup operations the water level of the pool must be raised by the addition of water until the water overflows the crest of the gutters and flushes away the debris.
- 5. The overflow gutter depth below the lip must be a minimum of 3 inches (8 centimeters) at the high points between the drains. The drains must be spaced at a maximum of 15 feet (4.6 meters) between centers and a slope provided in the bottom of not less than 2 1/2 inches in 10 feet (2 percent). The gutters must be of sufficient size and shape so that floating matter entering them will not be washed back into the pool. The branch piping to each overflow gutter drain must not be less than 2 inches (5 centimeters).
- 6. The outlet fittings must have a clear opening in the grating at least equal to 1 1/2 times the cross sectional area of the outlet. Where large gutters are used, they must be designed to prevent entrance or entrapment of bathers' arms or legs.
- 7. The opening into the gutter beneath the coping must be not less than 4 inches (10 centimeters) and the interior of the gutter must be not less than 3 inches (8 centimeters) wide.
- 8. Disposal of water from the overflow gutters may be either to waste or may enter the recirculation system. All overflow gutters connected to the recirculation system must be connected in an approved manner, such as a surge tank.
- 9. The gutter must be capable of removing 50 percent or more of the recirculated water and returning it to the recirculation system.

[Bd. of Health, Public Bathing Places Reg. Art. 26 §§ 26.9-26.9.8, eff. 5-21-74]—(NAC A 11-1-88)

#### NAC 444.168 Skimmers. (NRS 439.200, 444.070)

- 1. Each pool must be provided with at least one skimmer for each 400 square feet (37.2 square meters), or fraction thereof, of the pool area.
  - 2. There must be no fewer than two skimmers in every pool.
- 3. Any skimmer used in a pool must be designated by the NSF International as complying with all applicable requirements of Standard 50, "Circulation System Components and Related Materials for Swimming Pools, Spas/Hot Tubs," of the NSF International or in the absence of applicable requirements, be approved by the health authority. A copy of this standard may be obtained from the NSF International, P.O. Box 130140, Ann Arbor, Michigan 48113, at a cost of \$45.
- 4. The total capacity of all skimmers used must be a minimum of two-thirds of the required filter flow. Piping for skimmers used must be designed for a capacity of at least 80 percent of the required filter flow of the recirculation system, and in no case less than 30 gallons per minute (113.6 liters per minute).
  - 5. All inlets must be spaced at least 5 feet (1.5 meters) away from any skimmer.
- 6. One skimmer must be placed at a point in the pool opposite the direction of prevailing summer winds.
- 7. All skimmers used must be equipped with an approved equalizer valve and an equalizer line with an inside diameter of not less than 2 inches (5.08 centimeters), installed not less than 12 inches (30.48 centimeters) below the normal operating level of the water. The inlet to the equalizer line or lines must be designed to prevent the creation of a holding force whenever the body or limb of a bather comes into contact with the inlet. The inlet must be protected by a grill or shroud that will prevent a bather or any limb of a bather from entering the inlet.

[Bd. of Health, Public Bathing Places Reg. Art. 26 §§ 26.10-26.10.3, eff. 5-21-74]—(NAC A 7-23-82; 11-1-88; 1-16-96)

#### NAC 444.170 Filters. (NRS 439.200, 444.070)

- 1. Any filter used in a pool must be designated by the NSF International as complying with all applicable requirements of Standard 50, "Circulation System Components and Related Materials for Swimming Pools, Spas/Hot Tubs," of the NSF International or in the absence of applicable requirements, be approved by the health authority. A copy of this standard may be obtained from the NSF International, P.O. Box 130140, Ann Arbor, Michigan 48113, at a cost of \$45. Flow rates for filters must not exceed those listed by the NSF International Standard.
  - 2. The filter plant must be provided with influent pressure gauge.
- 3. The filter plant must be provided with a means for draining all filter units and piping, so that all parts of the system may be drained to prevent damage from freezing where so required.

[Bd. of Health, Public Bathing Places Reg. Art. 27, eff. 5-21-74]—(NAC A 7-23-82; 11-1-88; 1-16-96)

#### NAC 444.172 Strainers. (NRS 439.200, 444.070)

- 1. The recirculation system must include a strainer to prevent hair, lint and other solids from reaching the pump and filters.
- 2. Strainers must be corrosion resistant with openings not more than one-eighth of an inch in size providing a free flow area at least four times the area of the pump suction line and must be readily accessible for frequent cleaning. Valves must be installed adjacent to the strainer in order that the flow may be shut off during the cleaning or inspection. At least one spare strainer basket must be provided.
  - 3. Strainers may not be required in systems using vacuum diatomaceous earth filters. [Bd. of Health, Public Bathing Places Reg. Art. 26 § 26.5, eff. 5-21-74]

## NAC 444.174 Vacuum cleaners. (NRS 439.200, 444.070)

- 1. A vacuum cleaning system is required at each public bathing or swimming facility having a pool. It must be either a portable type or an integral part of the recirculation system.
- 2. There must be sufficient suction and capacity to remove all normal accumulations from the floor of the pool.
- 3. If the vacuum cleaner is an integral part of the recirculation system, sufficient connections must be located in the walls of the pool, at least 8 inches (20 centimeters) below the water level. The vacuum cleaner may be connected to the skimmers.
- 4. Water vacuumed from outdoor pools and from pools with considerable sediment must be discharged to waste.
- 5. Any visible dirt on the bottom or sides of the pool, and any visible scum or floating matter on the surface of the pool must be removed before the pool is used.

[Bd. of Health, Public Bathing Places Reg. Art. 28, eff. 5-21-74]—(NAC A 11-1-88)

## NAC 444.176 Disposal of waste. (NRS 439.200, 444.070)

- 1. Provision must be made to dispose of material cleaned from filters and of backwash water in a manner that will not create a nuisance.
- 2. If drainage to a sanitary sewer or storm sewer is permitted, an air gap must be provided which will positively preclude against surge or backflow introducing contaminated water into the pool or the recirculation system.
- 3. Diatomaceous earth must be disposed of so that no solids appear in the wastewater. This may be done by using a separation tank, receiving chamber, or any other method approved by the health authority.

# NAC 444.178 Disinfectants: Approval of use of chemical feeders and other disinfecting materials and methods. (NRS 439.200, 444.070)

- 1. A public bathing or swimming facility must be equipped with a chlorinator, hypochlorinator or other disinfectant feeder. Except as otherwise provided in subsections 2 and 3, chemical feeders and process equipment, other than compressed chlorine gas feeders, must be designated by the NSF International as complying with all applicable requirements of Standard 50, "Circulation System Components and Related Materials for Swimming Pools, Spas/Hot Tubs," of the NSF International or in the absence of applicable requirements, be approved by the health authority. A copy of this standard may be obtained from the NSF International, P.O. Box 130140, Ann Arbor, Michigan 48113, at a cost of \$45.
- 2. The health authority may approve other feeders if the operator of the facility demonstrates to the health authority that the required residual concentrations of disinfectant can be maintained using the feeder.
- 3. Chemical feeders must be capable of supplying not less than the equivalent of 3 pounds (1.4 kilograms) of chlorine for outdoor pools, or 1 pound (454 grams) of chlorine in the case of an indoor facility, per 10,000 gallons (37,850 liters) of facility capacity during a 24-hour period.
- 4. The health authority may approve other disinfecting materials or methods if the operator of the facility demonstrates to the satisfaction of the health authority that they provide a satisfactory residual effect which is easily measured and are as effective at disinfecting as the use of the chlorine concentrations required in <u>NAC 444.148</u>.
- 5. Disinfectant feeders must be installed to ensure that the flow of the chemical disinfectant will stop immediately if there is an interruption in the flow of water to the pool or through the disinfection system.

[Bd. of Health, Public Bathing Places Reg. Art. 29, §§ 29.1-29.1.2, eff. 5-21-74]—(NAC A 9-17-82; 11-1-88; 1-16-96)

- **NAC 444.180 Disinfectants: Use of chlorine gas.** (NRS 439.200, 444.070) An owner of a public bathing or swimming facility who obtained his or her operating permit on or after January 16, 1996, may not use compressed chlorine gas to sanitize or disinfect the facility. An owner of a public bathing or swimming facility who obtained his or her operating permit before January 16, 1996, may use compressed chlorine gas to sanitize the facility if the following features are provided:
- 1. The cylinders of chlorine, the scale required by subsection 15 and the chlorinator must be kept above grade in a separate, well-ventilated, reasonably gastight and corrosion-resistant enclosure.
- 2. The enclosure must be provided with vents near the floor which terminate outdoors through an airtight duct at a point where chlorine gas will not sink into spaces below the surface of the ground. Mechanical ventilation must be used. The exhaust system must be capable of providing not less than two air changes per hour in the enclosure and comply with applicable building and fire codes.
- 3. The door to the enclosure must not open into the pool enclosure and must open outward. All enclosures must be equipped with a quick exit door push bar. The enclosure must be equipped with a key locked latch, with the key lock located on the outside of the enclosure. The enclosure must be locked at all times except when personnel are inside.

- 4. An observation window must be provided in the wall or door of the enclosure that provides a good view of the inside of the enclosure and is not less than 18 square inches (116.14 square centimeters) in size. Artificial illumination of at least 20 foot-candles must be provided to permit the observation and maintenance of the equipment in the enclosure.
- 5. Switches for the operation of the exhaust fan and the artificial illumination must be located on the outside of the enclosure and near the door.
  - 6. The floor area of the enclosure must be of adequate size to house the chlorinator.
- 7. The chlorinator must be of rugged design, capable of withstanding wear without developing leaks.
- 8. Chlorine cylinders must be anchored to prevent their falling over. A valve stem wrench or valve handle must be maintained on the chlorine cylinder so the supply of gas can be shut off quickly in the case of an emergency. The valve protection hood must be kept in place except when the cylinder is in operation.
- 9. The chlorine feeding device must be vacuum operated and designed so that during accidents or interruptions of the water supply, or break in the system, the feeder positively and automatically shuts off the supply of chlorine gas and vents any leaking gas outside the enclosure at a safe point of discharge. The enclosure must be equipped with an acceptable and properly functioning device, with an audible alarm, to detect chlorine leakage. A leakage test kit consisting of ammonia water and a sponge swab must also be provided.
- 10. The chlorinator must be a solution feed type, capable of delivering chlorine at its maximum rate without releasing chlorine gas into the equipment room. Pressure vacuum relief vents must discharge to the outside atmosphere in a safe area.
- 11. The temperature of the chlorine metering equipment must not fall below 55°F (12.8°C). A means to keep the temperature above that level must be provided and used.
- 12. The chlorinators must be designed to prevent the backflow of water into the chlorine solution container.
- 13. A gas mask designed for use in a chlorine atmosphere and of a type approved by the appropriate federal agency must be located outside of the enclosure in a closed, unlocked cabinet. A replacement canister for use with the mask and a record book for recording any use of the mask must also be kept in the cabinet.
- 14. A placard must be posted on the outside of the enclosure that describes the first-aid measures for treating victims of chlorine exposure and includes the telephone number of the supplier of chlorine gas.
- 15. A scale or other suitable device must be provided so that the amount of chlorine gas contained in the cylinder can be determined.
- 16. A sign or placard stating "CAUTION CHLORINE GAS" must be placed on the door to the chlorinator room in a location where it is readily visible to any person approaching the door.
- 17. Chlorine or chlorination equipment must not be located in a building which houses sleeping guests.
- 18. Facilities that use gas chlorination must employ personnel trained to the satisfaction of the health authority in the safe handling of chlorine and in the operation and maintenance of chlorination equipment. These personnel must be available at all times that the facility is open to ensure the safety of employees and visitors.
- 19. Gas chlorine cylinders must not be stored in areas where they are exposed to direct sunlight or are readily accessible to unauthorized persons.

[Bd. of Health, Public Bathing Places Reg. Art. 29 §§ 29.2-29.2.17, eff. 5-21-74]—(NAC A 11-1-88; 1-16-96)

# NAC 444.182 Disinfectants: Handling; storage; toxicity. (NRS 439.200, 444.070)

- 1. The hand dosing of disinfectant or the introduction of disinfectant at a public bathing or swimming facility by means other than through a chemical feeder which has been approved by the health authority is not permitted except for superchlorination, superbromination or for bringing the residual of the disinfectant up to required levels when the facility is closed. No swimmers may use the facility until the residual of the disinfectant has dropped to the level required by NAC 444.148.
- 2. Adequate facilities for storing chemicals must be provided at all public bathing or swimming facilities. Chemicals must be stored in accordance with the instructions of the manufacturer or, in the absence of such instructions, as directed by the health authority.
- 3. Chemicals used in controlling the quality of water must be demonstrated to impart no toxic properties to the water. Chemicals used for the control of algae must be approved for that use by the health authority.
- 4. If the water in a facility cannot be maintained at a pH of 7.0 to 8.0, equipment for the feeding of chemicals to maintain the required pH must be provided. Equipment and piping used to apply chemicals to the water must be of such size, design and material that they may be cleaned and be free from clogging. All material used for such equipment and piping must be resistant to the action of the chemicals to be used in them.

[Bd. of Health, Public Bathing Places Reg. Art. 29 §§ 29.3-29.6, eff. 5-21-74]—(NAC A 9-17-82; 11-1-88)

# NAC 444.184 Testing equipment. (NRS 439.200, 444.070)

- 1. Every public bathing or swimming facility must have an approved test set for the determination of pH, disinfectant residuals, total alkalinity and, at facilities where chlorinated cyanurates are used, cyanuric acid concentrations.
- 2. The use of orthotolodine for determining the level of residual disinfectant is not approved. The use of the DPD method for determining the level of residual chlorine or bromine is approved.

[Bd. of Health, Public Bathing Places Reg. Art. 21, eff. 5-21-74]—(NAC A 7-23-82; 11-1-88)

NAC 444.186 Heating units. (NRS 439.200, 444.070) If a pool is heated, the heating unit must be isolated or installed in a manner which ensures that bathers will not be injured because of its placement. The heating unit must be equipped with a thermostat which controls the temperature of the water. All of the parts of the heating unit must be easy to remove for cleaning. [Bd. of Health, Public Bathing Places Reg. Art. 22 § 22.2, eff. 5-21-74]—(NAC A 9-16-92)

## NAC 444.188 Equipment rooms. (NRS 439.200, 444.070)

- 1. Pumps, chlorinators and other electrical equipment must be installed in a protective enclosure.
- 2. If any part of the equipment room is below grade, access by stairway and suitable drainage, by sump pump if necessary, must be provided. If an open stairwell is used, ventilation through a fully louvered door and a permanently open louvered vent on at least one other side of the room is required. Enclosed stairways require louvered vents on three sides of the room or an exhaust fan. The access opening must be at least 3 feet x 6 feet (0.9 x 1.8 meters).

3. Equipment must be installed so that there is adequate clearance to allow for its normal operation and maintenance. An equipment room must have space to store chemicals and auxiliary equipment.

[Bd. of Health, Public Bathing Places Reg. Art. 25, eff. 5-21-74]—(NAC A 9-17-82; 11-1-88)

#### **Water Recreation Attractions**

- NAC 444.194 Consultation regarding design of attraction. (NRS 439.200, 444.070) The design engineer shall consult with the health authority before preparing and submitting any engineering plans or specifications for a water recreation attraction. The consultation must include a discussion of:
- 1. Any potential failure to comply with the provisions of <u>NAC 444.010</u> to <u>444.306</u>, inclusive; and
- 2. Changes in the design of the attraction that may be necessary as a result of the noncompliance.

(Added to NAC by Bd. of Health, eff. 11-1-88)

NAC 444.1942 Posting signs indicating maximum depth. (NRS 439.200, 444.070) The operator of a water recreation attraction shall post one or more warning signs at the entrance to the attraction stating the maximum depth of water in the attraction.

(Added to NAC by Bd. of Health, eff. 11-1-88)

- **NAC 444.1944 Qualifications of attendants.** (NRS 439.200, 444.070, 444.115) Except as otherwise provided in NAC 444.274, each attendant employed at a water recreation attraction must be:
- 1. Certified by the Red Cross or an equivalent organization in first aid and cardiopulmonary resuscitation; and
- 2. Otherwise trained to deal with safety hazards related to the particular attraction at which the attendant is employed.

(Added to NAC by Bd. of Health, eff. 11-1-88)

#### NAC 444.1946 Plan for attendants. (NRS 439.200, 444.070)

- 1. The operator of each water recreation attraction shall establish a plan for attendants at the attraction and shall submit the plan to the health authority for review and approval.
  - 2. The plan for attendants must:
  - (a) Set forth in detail the manner in which lifeguards and other attendants are to be stationed;
  - (b) Describe training and emergency procedures;
  - (c) Include provisions for back-up attendants in the event of a multiple rescue; and
- (d) Include any other provisions necessitated by pool depth, wave action, line of sight, bather loads or other special conditions affecting the safety of bathers.
- 3. Any significant change in the plan for attendants must be submitted to the health authority for review and approval before it is put into effect.

(Added to NAC by Bd. of Health, eff. 11-1-88)

**NAC 444.1948 Deviation from requirements.** (NRS 439.200, 444.070) A water recreation attraction may deviate from the requirements of NAC 444.010 to 444.306, inclusive, if and to the extent:

- 1. An exemption from those requirements is necessary to accommodate the special use of the attraction; and
- 2. The design and construction of the attraction are within the limits of sound engineering practice and present no health or safety hazard.

(Added to NAC by Bd. of Health, eff. 11-1-88)

# NAC 444.195 Water slides: Design and construction. (NRS 439.200, 444.070)

- 1. A water slide must consist of one or more flumes, splash pools or slide runouts, a pump reservoir, and facilities for the filtration, disinfection and chemical treatment of water.
- 2. The structural design of a water slide and the materials used in its construction must conform with generally accepted structural engineering practices and must provide a sound, durable structure that will safely sustain all the dead loads, live loads, liquid hydrostatic and earth pressures encountered.
- 3. Any components or accessories of a water slide that come into contact with bathers must be assembled, arranged and finished so that their external surfaces and edges do not present an injury hazard to the skin of bathers under casual contact.
- 4. The owner of a water slide and the registered engineer who designs the slide are responsible for the safe design and construction of the entire facility.

(Added to NAC by Bd. of Health, eff. 11-1-88)

## NAC 444.1952 Water slides: Flumes. (NRS 439.200, 444.070)

- 1. Each flume of a water slide must be watertight. Its surfaces must be inert, nontoxic, smooth and easily cleaned.
- 2. If a tube-type flume is used, it must be designed or ventilated to prevent a hazardous concentration of toxic disinfectant fumes under all circumstances of operation.
  - 3. All curves and turns in a flume must be:
- (a) Designed so that the impact of bathers with the walls of the flume does not present a hazard; and
- (b) Banked so that the forces on bathers keep them safely inside the flume under all foreseeable circumstances of operation. Bathers must not become airborne.
- 4. In curved sections of a flume, the design of the wall of the flume must cause the outward thrust of the body of the bather to be dissipated towards the centerline of the flume.
- 5. All slopes in a flume must be designed so that the speed of bathers does not reach a point at which a safe equilibrium of dynamic forces cannot be maintained on any curve or turn in the flume.
- 6. In sections of a flume where bathers can stop, provision must be made by design or modification to prevent bathers from falling out of the flume.
- 7. The construction, dimensions and methods of mechanical attachment of the components of a flume must provide a smooth and continuous surface through the entire length of the flume. Any misalignment of joints in a sectional flume must not exceed 1/8 inch (3.17 millimeters).
- 8. The walls of any flume must be designed so that the continuous and combined action of hydrostatic, dynamic and static loads, as well as normal environmental deterioration, do not damage the flume bed to the extent of creating a structural failure that presents a hazard of injury to bathers or requires frequent patch repairs that may weaken the structural strength of the flume.

(Added to NAC by Bd. of Health, eff. 11-1-88)

- 1. The exit of any flume must be designed to ensure that bathers enter the splash pool or slide runout at a safe speed and angle of entry.
- 2. If a slide has two or more flumes and there is a point of intersection between the centerlines of any two flumes, the distance between that point and the point of exit for each intersecting flume must not be less than 20 feet (6.08 meters), or 30 feet (9.12 meters) if any bather exits a flume at high speed.

(Added to NAC by Bd. of Health, eff. 11-1-88)

NAC 444.1956 Water slides: Exit into splash pool. (NRS 439.200, 444.070) If bathers exit the flume of a water slide into a splash pool:

- 1. The flume must be:
- (a) Horizontal; and
- (b) Perpendicular to the wall of the pool at the point of exit,
- → for a distance of not less than 10 feet (3.04 meters) from that point.
- 2. The flume exit must be flush with the vertical wall of the pool at the point of exit and not more than 2 inches (5.08 centimeters) above, nor less than 6 inches (15.24 centimeters) below, the normal operating level of the pool.
  - 3. The distance between:
- (a) The side wall of the pool and that portion of the flume exit nearest the wall must be not less than 5 feet (1.52 meters) at the point of exit.
- (b) The centerline of the flume and the centerline of any adjacent flume must be not less than 6 feet (1.82 meters) at the point of exit.
- (c) The point of exit and the side of the pool opposite bathers as they exit, excluding any steps, must be not less than:
- (1) Twenty feet (6.08 meters), if the flume ends above or below the normal operating level; and
  - (2) Thirty feet (9.12 meters) if the flume ends at the normal operating level.
- 4. The slide may not be used if the main drain of the pool is not clearly visible from the deck with the flume water turned off.

(Added to NAC by Bd. of Health, eff. 11-1-88)

#### NAC 444.1958 Water slides: Splash pools. (NRS 439.200, 444.070)

- 1. If a splash pool is used at a water slide, it must be located at the base of the slide.
- 2. Except as otherwise provided in this subsection, the depth in a splash pool at the end of the flume must be maintained at 3 1/2 feet (1.05 meters) from the normal operating level to the floor. This depth must be maintained for a distance of not less than 20 feet (6.08 meters) from the point of exit from the flume, or not less than 30 feet (9.12 meters) from that point if the point of exit is even with the normal operating level. The health authority may waive these requirements if a special exit system is used that ensures a safe exit from the flume and safe entry to the splash pool.
- 3. Beyond the area of level floor required by subsection 2, in the area of the pool opposite the point of exit from the flume, the floor of the splash pool may have a constant slope upward of not more than 1 in 7.
- 4. If steps are provided instead of exit ladders or stepholes with handrails, a handrail must be provided at the steps opposite the point of exit from each flume. The surface edge of the splash pool steps must be outlined in a contrasting color.

(Added to NAC by Bd. of Health, eff. 11-1-88)

#### NAC 444.196 Water slides: Decks. (NRS 439.200, 444.070)

- 1. A deck must be provided along the exit side of the splash pool and along one or more of the other sides of the pool. The pump and reservoir area must be accessible by a deck not less than 3 feet (0.91 meters) wide.
- 2. All decks must be sloped at not less than 1/4 inch per foot to drains or approved surface water disposal areas.
- 3. If deck drains are provided, they must have an inlet opening of not less than 4 inches (10.16 centimeters) in diameter.

(Added to NAC by Bd. of Health, eff. 11-1-88)

### NAC 444.1962 Water slides: Means of access. (NRS 439.200, 444.070)

- 1. A concrete walkway, steps, stairway or ramp must be provided between the splash pool and the top of the flume.
  - 2. The walkway or other means of access must not retain standing water and must:
  - (a) Conform to the structural requirements of the local building code.
  - (b) Be not less than 4 feet (1.21 meters) wide.
  - (c) Be provided with handrails.
  - (d) Have a slip-resistant finish.
- (e) Be separated from the flume by a physical barrier that is located far enough from the flume to prevent it from being contacted by bathers on the flume.

(Added to NAC by Bd. of Health, eff. 11-1-88)

## NAC 444.1964 Water slides: Runouts. (NRS 439.200, 444.070)

- 1. Slide runouts, if used, must have an exit opening or step unless one or both walls of the runout are not more than 12 inches (30.48 centimeters) in height.
- 2. Runouts must be designed with adequate length and water depth and sloped so as to bring the bather to a safe stop.

(Added to NAC by Bd. of Health, eff. 11-1-88)

# NAC 444.1966 Water slides: Pump reservoirs. (NRS 439.200, 444.070)

- 1. Pump reservoirs used in water slides must have sufficient volume to contain not less than 2 minutes of combined flow from all water treatment and flume pumps or must contain enough water to ensure that the splash pool will maintain a constant water depth.
- 2. The interior of pump reservoirs must be watertight with a hard trowel or equivalent impervious, slip-resistant finish.
- 3. Pump reservoirs must be accessible only to authorized persons. Intakes to the slide pump must be designed to allow cleaning without danger of trapping the operator.

(Added to NAC by Bd. of Health, eff. 11-1-88)

## NAC 444.1968 Water slides: Control of water. (NRS 439.200, 444.070)

- 1. A surge-free automatic water makeup system with a manual override must be provided and constructed so that the normal operating level of the splash pool is maintained at all times. Approved backflow protection must be provided.
- 2. The velocity of water at the weir or inlet grate must not exceed 1 1/2 feet (0.4 meters) per second.
- 3. A perimeter overflow gutter, if used, is not required directly under slide flumes or along the weirs that separate splash pools and pump reservoirs.

- 4. Surface skimming devices may be used instead of a perimeter overflow gutter. (Added to NAC by Bd. of Health, eff. 11-1-88)
- **NAC 444.197 Water slides: Visitors and spectators.** (NRS 439.200, 444.070) There must be a definite separation between the area used by visitors and spectators and that used by bathers. Visitors and spectators in street clothing may be allowed within the pool enclosure if they remain in a separate area segregated from the area used by bathers.

(Added to NAC by Bd. of Health, eff. 11-1-88)

# NAC 444.1972 Water slides: Food and drink; trash. (NRS 439.200, 444.070)

- 1. Food or drink must not be permitted in locker or change rooms, in the immediate area of the flumes and pools, or on the surrounding decks, stairs and walkways. Food and drink must be permitted in any visitor and spectator area or in any segregated snack area for bathers.
- 2. Trash containers must be provided to keep litter off the decks and walkways and out of the flumes and pools.

(Added to NAC by Bd. of Health, eff. 11-1-88)

NAC 444.1974 Water slides: Posting notice of prohibited conduct. (NRS 439.200, 444.070) The operator of a water slide shall post one or more warning signs at the entrance to the facility. Each sign must state that the following types of conduct are prohibited within the facility:

- 1. Running, standing, kneeling, rotating, tumbling or stopping in any flume or tunnel.
- 2. Horseplay.
- 3. Diving or flipping while exiting from a flume.
- 4. Use of the slide while under the influence of alcohol or drugs.
- 5. Use of a flume by more than one person at a time.
- 6. Failure to obey the instructions of the top pool supervisor or the lifeguard.
- 7. Failure to keep hands inside the flume while using the slide.
- 8. Failure to leave the landing pool promptly after exiting from the slide.
- 9. The possession of any glass, bottle or food in or near any pool.
- 10. Entry into an area of grass or other vegetation.
- 11. The possession of any toy or can.
- 12. The use of any clothing on the slide other than the usual swimwear.
- 13. Wearing any comb, bracelet, watch or other jewelry.
- 14. Failure to shower before using the slide.

(Added to NAC by Bd. of Health, eff. 11-1-88)

#### NAC 444.1976 Water slides: Precautions for safety. (NRS 439.200, 444.070)

- 1. At all times while a water slide is open for use, an attendant must be on duty at each splash pool or slide runout. The attendant shall serve as the safety director of the slide. In that capacity, he or she shall control crowds, keep bathers moving through the pool or runout in an orderly fashion, and control any unsafe behavior in the lower flumes, in the pool or runout, or on the decks near the base of the slide.
- 2. At all times while the slide is open for use, an attendant must be on duty at each entrance to a flume. The attendant shall control bathers near the entrance, regulate the departure of each bather down the slide and control any unsafe behavior in the upper flumes.

- 3. Radio communication between the flume entry attendant and the splash pool or slide runout attendant must be provided.
- 4. Each water slide must have a means to allow the flume entry attendant to monitor the slide exit.

(Added to NAC by Bd. of Health, eff. 11-1-88)

# NAC 444.198 Activity pools. (NRS 439.200, 444.070)

- 1. The recirculation and filtration systems of activity pools must have a maximum turnover cycle of 4 hours.
- 2. Amusement devices used in activity pools must be designed and maintained so that their surfaces are smooth, nontoxic and easily cleanable. The devices must not pose a safety or health hazard to bathers and must not interfere with circulation or disinfection of the water.

(Added to NAC by Bd. of Health, eff. 11-1-88)

#### NAC 444.1985 Wave pools. (NRS 439.200, 444.070)

- 1. The generation of waves more than 3 feet (0.91 meters) in height in a wave pool, regardless of the depth of the pool, must not continue for more than 15 minutes at a time. When the generation of waves ends, it must be stopped for not less than 5 minutes.
- 2. The recirculation and filtration system of wave pools must have a maximum turnover cycle of 4 hours.
- 3. The wave pool must not be used if the main drain is not clearly visible from the deck with the wave generating equipment turned off.
- 4. Bathers must gain access to the wave pool at the shallow or beach end. The sides of the pool must be protected from unauthorized entry into the pool by the use of a fence or other comparable barrier.
- 5. Wave pools must be provided with handholds at the static water level. The handholds must be self-draining and must be installed so that their outer edge is flush with the pool wall. The design of the handholds must ensure that body extremities will not become entangled during wave action.
  - 6. Life jackets must be provided free for use by bathers who request them.
- 7. Each permanent station for pool attendants must be provided with a clearly labeled and readily accessible emergency shut-off switch for the control of the wave action.
- 8. An audible warning system must be provided to alert bathers of the beginning of wave generation.
- 9. The area where waves are generated must be protected by a barrier having openings not more than 2 inches (5.08 centimeters) in diameter.
- 10. Step holes and handrails must be provided at one or more locations along the wall of the pool. The step holes and handrails must extend down the wall so that they will be easily accessible during wave generation at the lowest water level. The distance between the handrail and the wall must not exceed 6 inches (15.24 centimeters).
- 11. A sign stating "NO DIVING" in contrasting letters not less than 4 inches (10.16 centimeters) in height must be posted in a conspicuous place.

(Added to NAC by Bd. of Health, eff. 11-1-88)

#### NAC 444.199 Child amusement lagoons. (NRS 439.200, 444.070)

1. The recirculation and filtration systems of child amusement lagoons must have a maximum turnover cycle of 1 hour.

2. Amusement devices used in child amusement lagoons must be designed and maintained so that their surfaces are smooth, nontoxic and easily cleanable. The devices must not pose a safety or health hazard to bathers and must not interfere with circulation or disinfection of the water.

(Added to NAC by Bd. of Health, eff. 11-1-88)

#### NAC 444.1995 Watercourse rides. (NRS 439.200, 444.070)

- 1. The recirculation and filtration systems of watercourse rides must have a maximum turnover cycle of 4 hours.
- 2. Handrails, steps, stairs and booster inlets for watercourse rides must not protrude into the watercourse.
- 3. The watercourse must not be narrower than 12 feet (3.65 meters), nor deeper than 3 1/2 feet (1.06 meters).
- 4. An approved method of exit must be provided not less frequently than every 200 feet (60.96 meters) along the watercourse.
  - 5. A deck must be provided on at least one side of the watercourse.
  - 6. The design velocity of water in a watercourse ride must not exceed 2 miles per hour. (Added to NAC by Bd. of Health, eff. 11-1-88)

#### **Miscellaneous Facilities**

#### NAC 444.200 Spray pools. (NRS 439.200, 444.070)

- 1. The water supply for a spray pool must at all times meet the requirements relating to water set forth in NAC 444.108 to 444.188, inclusive.
- 2. The spray pool must be equipped at its low point with an unvalved drain of sufficient capacity and design to prevent any accumulation of water in the pool.
- [Bd. of Health, Public Bathing Places Reg. Art. 43 §§ 43.4-43.4.3, eff. 5-21-74]—(NAC A 7-23-82; 11-1-88)

#### NAC 444.202 Wading pools: Construction. (NRS 439.200, 444.070)

- 1. A wading pool must have:
- (a) A maximum depth of 24 inches (60 centimeters);
- (b) A slope which does not exceed 1 in 12; and
- (c) A slip-resistant finish.
- 2. A wading pool constructed after November 1, 1988, must have a maximum turnover cycle of 30 minutes. All wading pools must have a separate system for circulation. Equipment which is used to recirculate and disinfect the water and which meets the applicable requirements of NAC 444.108 to 444.204, inclusive, must be installed and operated at wading pools which cannot maintain satisfactory water quality by using the equipment from an adjacent public bathing or swimming facility.
- 3. The outlets from the wading pool may be connected to a sanitary drain or returned to the recirculation system of the pool for refiltration at the suction side of the pump. A wading pool must have a waste outlet at its deepest point; so that it may be completely emptied to a sanitary drain.
  - 4. A wading pool must have at least two inlets.
- 5. In general, standards of sanitation, surface skimming and all other details must be equal or superior to those set forth in NAC 444.108 to 444.188, inclusive.

[Bd. of Health, Public Bathing Places Reg. Art. 43 §§ 43.2-43.3.5, eff. 5-21-74]—(NAC A 9-17-82; 11-1-88)

# NAC 444.204 General requirements for wading pools; location of spray pools. (NRS 439.200, 444.070)

- 1. Adequate sanitary toilet facilities, as determined by the health authority, must be available in the vicinity of the pool.
- 2. A sanitary drinking fountain must be provided at one side or end of the area with a raised step to enable children of all sizes to drink without assistance.
- 3. Wading pools and spray pools must be located at the shallow end of the main pool and must be separated from it by a separate fence or barrier as described in NAC 444.136.
  - 4. Underwater lights are prohibited in wading pools.
- 5. Wading pools, by the nature of their usage, are likely to become polluted and a public hazard. Where installed, they must be operated very carefully to minimize the danger to public health.
- [Bd. of Health, Public Bathing Places Reg. Art. 43 §§ 43.5-43.8, eff. 5-12-74]—(NAC A 11-1-88)

#### NAC 444.206 Special purpose pools. (NRS 439.200, 444.070, 444.080)

- 1. Special purpose pools may deviate from the requirements of <u>NAC 444.010</u> to <u>444.306</u>, inclusive, if:
- (a) Their design and construction are within the limits of sound engineering practice and present no health or safety hazard; and
  - (b) The deviation is required because of the special use of the pools.
- 2. The operating permit issued for a special purpose pool must denote that it is for such a pool and must state the purpose for which the pool is to be used.
- 3. The health authority shall require such measures as he or she deems necessary to ensure the health and safety of bathers using a special purpose pool.

(Added to NAC by Bd. of Health, eff. 11-1-88)

#### NAC 444.207 Isolation and flotation tanks. (NRS 439.200, 444.070)

- 1. The recirculation, filtration and disinfection systems of isolation and flotation tanks must complete no fewer than four turnover cycles between users of the tank.
  - 2. The maximum bathing load in a tank is one person.
- 3. The solution in the tank must be disinfected by normal chlorination or bromination at 3.0 to 5.0 ppm.
- 4. Notices must be posted in the vicinity of the tank in the manner and with the information required by NAC 444.530.
  - 5. The maximum temperature of the solution in the tank must not exceed 95°F (35°C).
- 6. The tank must be designed or ventilated to prevent any hazardous concentration of fumes from toxic disinfectants under all circumstances of operation.

(Added to NAC by Bd. of Health, eff. 11-1-88)

#### NAC 444.208 Artificial swimming lagoons. (NRS 439.200, 444.070)

1. The design engineer shall consult with the health authority before the preparation and submission of any engineering plans or specifications for an artificial swimming lagoon.

2. An artificial swimming lagoon may deviate from other provisions of <u>NAC 444.010</u> to <u>444.306</u>, inclusive, if its design and construction are within the limits of sound engineering practice and present no health or safety hazard.

(Added to NAC by Bd. of Health, eff. 11-1-88)

#### **Bathhouses**

#### NAC 444.210 Required facilities. (NRS 439.200, 444.070)

- 1. Dressing facilities, shower facilities and drinking fountains conforming to the minimum requirements of this section must be provided for each public bathing or swimming facility except where the users of the facility have access to showers, toilet and dressing facilities in adjacent living quarters or such facilities are otherwise available for use by all persons who may use the facility.
- 2. These facilities must be under the general supervision of the owner of the public bathing or swimming facility.
  - 3. As used in this section:
- (a) "Adjacent" means that not more than 10 percent of bathers will have to travel more than 300 feet (91.4 meters) to sanitary facilities.
- (b) "Living quarters" includes any hotel, motel or other place of lodging, or a trailer park, apartment, condominium or other facility containing multiple dwellings.
- 4. For distances greater than that provided in paragraph (a) of subsection 3, the following minimum sanitary facilities must be provided in the bath house:

Men: 1 water flush toilet

1 lavatory
1 shower

Women: 1 water flush toilet
1 lavatory
1 shower

[Bd. of Health, Public Bathing Places Reg. Art. 42 §§ 42.1 & 42.1.1-42.1.2, eff. 5-21-74]—(NAC A 7-23-82; 11-1-88)

#### NAC 444.212 General requirements. (NRS 439.200, 444.070)

- 1. The rooms of bathhouses must be well lighted, drained, ventilated and of good construction, with impervious materials employed in general. They must be finished in light colors and so developed and planned that good sanitation can be maintained throughout the building at all times.
- 2. Every bathhouse must be provided with separate facilities for each sex with no interconnection between the provisions for male and female.
- 3. No food, drink or glass containers are permitted in the dressing room or bath areas.

[Bd. of Health, Public Bathing Places Reg. Art. 42 §§ 42.2.2, 42.2, 42.3 & 42.18, eff. 5-21-74]—(NAC A 7-23-82; 11-1-88)

## NAC 444.214 Minimum sanitary plumbing facilities. (NRS 439.200, 444.070)

- 1. Minimum sanitary plumbing facilities must be provided at each public bathing or swimming facility as follows:
- (a) For males: One water flush toilet, two water flush urinals and one lavatory is presumed adequate for the first 100 bathers. One water closet, one urinal and one lavatory must be provided for each additional 100 bathers or major fraction thereof. Not less than two shower

heads must be provided which will be assumed to be adequate for the first 80 bathers. One additional shower head must be provided for each additional 40 bathers.

- (b) For females: Not less than three water flush toilets and one lavatory must be provided which will be assumed to be adequate for the first 100 bathers. Two water closets and one lavatory must be provided for each additional 100 bathers or major fraction thereof. Not less than two shower heads must be provided which is presumed to be adequate for the first 80 bathers. One shower head must be added for each 40 additional bathers.
- (c) Fixture schedules should be increased for facilities at schools or other similar locations where bather loads may reach peaks due to schedules of use.
- 2. These minimum criteria for bathhouse plumbing facilities are based upon the anticipated maximum attendance in bathers.
- 3. The requirements of this section do not apply to any swimming pool operated solely for and in conjunction with a hotel, motel or other place of lodging, or a trailer park, apartment, condominium or other facility containing multiple dwellings.

[Bd. of Health, Public Bathing Places Reg. Art. 42 §§ 42.4-42.4.4, eff. 5-21-74]—(NAC A 11-1-88)

# NAC 444.216 Plumbing requirements. (NRS 439.200, 444.070)

- 1. At least one drinking fountain must be made available to bathers at a public bathing or swimming facility. A raised step must be provided to enable children of all sizes to drink from the fountain without assistance.
- 2. All water provided for drinking fountains, lavatories and showers must be potable and meet the requirements and conform with the standards of the Health Division for drinking water.
- 3. Heated water must be provided at all shower heads. The water heater and thermostatic mixing valve must be inaccessible to bathers and must be capable of providing 3 gallons (11.4 liters) per minute per shower head of not less than 90°F (32°C) water. The showers must be so designed that a proper mixture of hot and cold water may be obtained without danger of scalding the bather.
- 4. Hose bibs must be provided for flushing down the dressing rooms and the interior of the bathhouse.

[Bd. of Health, Public Bathing Places Reg. Art. 42 §§ 42.7, 42.8, 42.11 & 42.16, eff. 5-21-74]—(NAC A 11-1-88)

#### NAC 444.218 Floors. (NRS 439.200, 444.070)

- 1. Floors of the bathhouse must be of smooth finished material with a slip-resistant surface and impervious to moisture. Junctions between walls and floors must be coved.
- 2. Floor drains must be provided to ensure positive drainage of all parts of the building with a slope in the floor of not less than 1/4 inch per foot (2 percent), toward drains.

[Bd. of Health, Public Bathing Places Reg. Art. 42 §§ 42.9 & 42.10, eff. 5-21-74]—(NAC A 11-1-88)

#### NAC 444.222 Furnishings. (NRS 439.200, 444.070)

- 1. All furniture must be of simple character and easily cleanable. Locker compartments, furniture, partitions and other appurtenances in dressing rooms must be so installed so as to permit thorough cleaning and flushing of the floor.
- 2. All partitions between portions of the dressing room areas, screen partitions, shower, toilet and dressing room booths must be of durable material not subject to damage by water and

must be designed so that a water way is provided between the partitions and floor to permit thorough cleaning of the floor area with hoses and brooms.

- 3. Dispensers for providing soap must be provided at each lavatory and shower head. The dispensers must be all metal or plastic type. The use of glass in these is not permitted. Paper towels must be provided for users of the lavatories.
- 4. Mirrors of unbreakable material must be provided over each lavatory, and toilet paper holders, with toilet paper, must be provided at each water closet combination.
  - 5. All light fixtures must be adequately shielded to prevent injury to bathers.
- [Bd. of Health, Public Bathing Places Reg. Art. 42 §§ 42.2.3 & 42.13-42.15, eff. 5-21-74]—(NAC A 11-1-88)

#### NAC 444.224 Entrances and exits. (NRS 439.200, 444.070)

- 1. The entrance to any pool, except a splash pool, in a public bathing or swimming facility must be located at or near the shallow end of the pool.
- 2. An emergency fire exit must be provided in the fence or structure enclosing the pool area, and this exit must be plainly marked. A suitable fire extinguisher must be maintained in the checking stand.
- 3. The entrances and exits to the dressing areas must be screened to break the line of sight. [Bd. of Health, Public Bathing Places Reg. Art. 42 §§ 42.2.1, 42.3.1 & 42.17, eff. 5-21-74]—(NAC A 11-1-88)

#### NAC 444.226 Steps not permitted. (NRS 439.200, 444.070)

- 1. No difference in elevation, requiring steps, may exist in the interior of male or female dressing areas.
- 2. No steps are permitted between the bathhouse and the adjoining deck areas. If it is necessary that the bathhouse floor be at a different elevation than the deck, ramps must be provided at the access doors. Where ramps are used between the bathhouse and the deck, the slope may not exceed 3 inches per foot (25 percent) and must be positively slip-resistant.
- [Bd. of Health, Public Bathing Places Reg. Art. 42 §§ 42.12 & 42.12.1, eff. 5-21-74]—(NAC A 11-1-88)

#### NAC 444.228 Ventilation. (NRS 439.200, 444.070)

- 1. Indoor pools, shower rooms, dressing rooms, and toilets of all public bathing or swimming facilities and natural bathing places must be properly ventilated. The ventilating system for indoor pools must be so designed as to prevent direct drafts on the bathers.
  - 2. All interior rooms must be ventilated so that they do not remain excessively damp.
  - 3. Toilet rooms must be ventilated to the outside so that no odor nuisance may develop. [Bd. of Health, Public Bathing Places Reg. Art. 33, eff. 5-21-74]—(NAC A 11-1-88)

#### Mineral Baths, Therapeutic Pools and Similar Facilities

**NAC 444.230 Applicability.** (NRS 439.200, 444.070) Any public bath containing water for the immersion of the body or providing a hot vapor environment for whatever effect, other than a public spa as defined by NAC 444.385, must comply with the provisions of NAC 444.230 to 444.236, inclusive.

[Bd. of Health, Public Bathing Places Reg. Art. 45 §§ 45.1 & 45.10, eff. 5-21-74]—(NAC A 7-23-82; 11-1-88)

#### NAC 444.232 Water quality. (NRS 439.200, 444.070)

- 1. The water in such baths must be maintained free of disease organisms and must be provided under one of the following conditions:
- (a) The water must be purified by recirculation in accordance with the provisions of <u>NAC</u> 444.152 to 444.170, inclusive.
- (b) The bath may be used exclusively by one person after which the basin must be drained, the walls scrubbed and disinfected, and then refilled.
- (c) The bath water must be exchanged by flow-through of unused water so as to provide a complete change of water in 1 hour or less if the basin has a capacity of less than 1,000 gallons (3,785 liters), or in 2 hours or less if the basin has a capacity of 1,000 gallons (3,785 liters) or more.
- (d) In all instances the bath lining must be of cleanable, impervious construction, and must be kept clean.
  - 2. Potable drinking water must be supplied to the premises.
  - [Bd. of Health, Public Bathing Places Reg. Art. 45 §§ 45.2-45.2.4 & 45.6, eff. 5-21-74]

#### NAC 444.234 Temperature. (NRS 439.200, 444.070)

- 1. The maximum recommended temperature in such baths is 104°F (40°C).
- 2. Signs which state that extended exposure to the hot water or vapors may be detrimental to the health of persons with heart conditions must be posted.

[Bd. of Health, Public Bathing Places Reg. Art. 45 §§ 45.8 & 45.9, eff. 5-21-74]—(NAC A 7-23-82)

### NAC 444.236 Required facilities. (NRS 439.200, 444.070)

- 1. Toilet facilities must be provided, separate for each sex, unless individual facilities are provided for each unit. The toilet rooms and fixtures must be of cleanable construction and must be kept clean.
- 2. Shower facilities must be provided, separate for each sex, unless individual facilities are provided for each bath unit. The shower units must be of cleanable construction, free of cracks and crevices and must be kept clean. Each person must be required to take a shower bath with soap prior to entering a bath which is to be occupied by more than one person.
- 3. Where resting rooms, dressing rooms or reclining facilities are provided, they must be kept clean. Floors, walls and ceiling must be of good construction and must be kept in good repair.
- 4. All appurtenances to the bath facility must be of cleanable construction and must be kept clean.

[Bd. of Health, Public Bathing Places Reg. Art. 45 §§ 45.3-45.5 & 45.7, eff. 5-21-74]

#### **Natural Bathing Places**

NAC 444.240 Permit required. (NRS 439.200, 444.070, 444.080) A permit to operate a natural bathing place on any waters of this State must be obtained from the health authority. Acceptability as a public bathing place will be based on the provisions of NAC 444.242.

[Bd. of Health, Public Bathing Places Reg. Art. 46 § 46.1, eff. 5-21-74]

#### NAC 444.242 Standards for approval. (NRS 439.200, 444.070)

- 1. Approval of public bathing beaches will be based upon the result of a sanitary survey of the site and the results of the bacteriological and chemical analysis of the water in the bathing area.
- 2. The flow of water supplying a bathing beach or the volume of water in a body of water on which a beach is located must be sufficient to provide at least 500 gallons (1,853 liters) of water per bather when the greatest number of bathers are in the water.
- 3. Evidence of human-caused pollution, floating debris, sludge accumulation and similar gross pollutants will disqualify the site as an acceptable bathing area until such pollutants are completely and permanently eliminated.
  - 4. There must be a minimum of 40 square feet (3.7 square meters) of beach area per bather.
- 5. The slope of the bottom of the beach area must be gradual and be such as to not create a safety hazard to the user of the beach. The area floor must be free of glass, tin cans and other hazards.
- 6. Because each natural bathing place presents conditions different from all other natural bathing places, the health authority may apply, waive or modify these provisions as it feels best serves the public health.

[Bd. of Health, Public Bathing Places Reg. Art. 46 §§ 46.2-46.3 & 46.10, eff. 5-21-74]—(NAC A 7-23-82)

#### NAC 444.246 Notices and markers. (NRS 439.200, 444.070)

- 1. Areas of excessive depths, containing rocks, near steep banks, or other areas which might be considered a potential hazard to the users must be adequately marked with buoys, poles or other markers so as to warn users.
- 2. The outer safe limits or boundary of the bathing area must be marked with buoys or other markers visible to bathers and spaced at not more than 100 feet (30.5 meters) apart.
- 3. Signs must be placed at the ends of each beach to define the area within which bathing is allowed and lifesaving facilities furnished. The sign "No Lifeguard Service Beyond This Point" must be installed at each end of the beach.

[Bd. of Health, Public Bathing Places Reg. Art. 46 §§ 46.7, 46.8 & 46.16, eff. 5-21-74]

# NAC 444.248 Required facilities. (NRS 439.200, 444.070)

- 1. Sanitary facilities must be provided in proportion to the anticipated bathing load. These must include:
  - (a) Toilet and hand washing facilities and dressing rooms clearly marked for each sex;
  - (b) A safe and approved water supply; and
  - (c) Drinking fountains, soap and toilet tissue.
- 2. Conveniently located rubbish containers must be provided. These containers must be emptied whenever necessary and be kept in a sanitary condition.
- 3. Where night bathing is permitted, adequate lighting must be provided for the bathhouses and bathing area.
- 4. There must be telephone connections and transportation facilities available for emergency use.

[Bd. of Health, Public Bathing Places Reg. Art. 46 §§ 46.4-46.6 & 46.11, eff. 5-21-74]

#### NAC 444.250 Lifeguards. (NRS 439.200, 444.070)

1. There must be at least one lifeguard on duty for each 400 feet (122 meters) of beach front or major fraction thereof.

- 2. One lifeguard tower must be provided for each 600 feet (183 meters) of beach front or major fraction thereof. Each lifeguard tower must be equipped with a 20 inch (51 centimeter) lifesaving ring with 100 feet (30.5 meters) minimum of line, and a torpedo buoy with 50 feet (15.2 meters) of line.
- 3. The lifeguard must have the qualifications stated in <u>NAC 444.274</u>. If bathing is permitted beyond a depth of 5 feet (1.5 meters), a suitable boat equipped with a life ring, oars, and oarlocks or a paddle board must be provided for each 1,000 feet (304.8 meters) of beach or major fraction thereof.
- 4. At least one lifeguard must be stationed on the tower at all times while other lifeguards may be patrolling on the beach or in boats.

[Bd. of Health, Public Bathing Places Reg. Art. 46 §§ 46.12-46.15, eff. 5-21-74]

NAC 444.252 When bathing prohibited. (NRS 439.200, 444.070) Bathing must not be permitted during time of undue turbidity caused by natural occurrences or during electrical storms.

[Bd. of Health, Public Bathing Places Reg. Art. 46 § 46.9, eff. 5-21-74]

#### **Operation**

#### NAC 444.258 Operating permits. (NRS 439.200, 444.070, 444.080)

- 1. No public bathing or swimming facility or natural bathing place may operate unless the operator has applied for and received an operating permit from the health authority.
- 2. Permits expire on January 1 of each year, unless previously revoked for a violation of the statutes and the regulations of the State Board of Health or the local board of health. The health authority will exercise the right to close facilities and bathing places not operating in conformity with those regulations.
- 3. A temporary permit may be issued in exceptional cases for a limited time to permit management to make changes to comply with the minimum requirements if sufficient safeguards are enforced to protect the health and safety of the public.
- 4. The permit must be posted in a conspicuous place at or near the office of each facility or bathing place. In addition, placards directing the behavior of bathers must be prominently posted in locker rooms, offices, showers, toilets or elsewhere about the facility or bathing place.

[Bd. of Health, Public Bathing Places Reg. Art. 3, eff. 5-21-74]—(NAC A 11-1-88)

# NAC 444.259 Fees for permits and review of plans. (NRS 439.150, 439.200, 444.070, 444.080)

- 1. The Health Division shall charge and collect \$402 for each annual permit to operate a public bathing or swimming facility or natural bathing place, except in areas where the laws and regulations governing such facilities and bathing places are administered by local health authorities.
- 2. The Health Division shall charge and collect \$325 for reviewing plans for a new public bathing or swimming facility or natural bathing place, except in areas where the laws and regulations governing such facilities and bathing places are administered by local health authorities.
- 3. The Health Division shall charge and collect \$262.50 for reviewing plans for a remodeled public bathing or swimming facility or natural bathing place which has a permit, except in areas

where the laws and regulations governing such facilities and bathing places are administered by local health authorities.

(Added to NAC by Bd. of Health, eff. 7-23-82; A 7-22-87; 11-1-88; 8-31-89; 1-16-96; R193-03, 1-22-2004; R100-07, 10-31-2007)

NAC 444.260 Instructions on operation and maintenance of facilities and equipment. (NRS 439.200, 444.070) Upon the completion of any public bathing or swimming facility, the owner and his or her operators must be given complete written and oral instructions by the contractor in the operation of the facility and all of its equipment, in the maintenance of the water used in the facility, and specifically in the details of maintenance of the equipment. All valves must be permanently tagged and a valve operating schedule must be provided for every operation.

[Bd. of Health, Public Bathing Places Reg. Art. 44, eff. 5-21-74]—(NAC A 11-1-88)

#### NAC 444.262 Supervision and maintenance of facilities. (NRS 439.200, 444.070)

- 1. Supervision must be present at all times a wading pool is in use.
- 2. Every public bathing or swimming facility must be maintained under the supervision of a qualified operator who is responsible for the sanitation and safety of the facility and for the maintenance of its equipment and records.
- 3. The operator must demonstrate to the health authority that he or she is familiar with the function, operation and maintenance of the equipment in the facility and is capable of maintaining the water chemistry within the required limits.

[Bd. of Health, Public Bathing Places Reg. Art. 38 §§ 38.1, 38.2 & 43.1, eff. 5-21-74]—(NAC A 11-1-88)

#### NAC 444.263 Use of covers and solar blankets. (NRS 439.200, 444.070)

- 1. A swimming pool cover or solar blanket may be used only if the pool is closed, unless the cover or blanket:
  - (a) Is secured around its entire perimeter; and
  - (b) Is designed to support and is capable of supporting the live load of one adult person.
- 2. Except as otherwise provided in subsection 1, unauthorized persons must not be permitted in the pool area while a pool cover or solar blanket is in use.

(Added to NAC by Bd. of Health, eff. 11-1-88)

#### NAC 444.264 Records. (NRS 439.200, 444.070)

- 1. A written record of all data pertaining to the operation and sanitation of each public bathing or swimming facility and natural bathing place must be maintained by the management and kept at all times available to the health authority.
- 2. The operator shall initial the record and the record must include, as appropriate for the facility or bathing place:
  - (a) The daily attendance;
  - (b) The amounts of various chemicals used daily;
  - (c) The approximate amount of fresh water added daily;
  - (d) The daily water temperature;
  - (e) The results of chemical and bacteriological tests;
  - (f) The time and date of emptying and cleaning any pool or backwashing filters;
  - (g) Recirculation operating time;

- (h) The names of all attendants; and
- (i) Any other information which the health authority may require from time to time. [Bd. of Health, Public Bathing Places Reg. Art. 5, eff. 5-21-74]—(NAC A 11-1-88)

## NAC 444.266 Lifesaving equipment. (NRS 439.200, 444.070)

- 1. Not less than one unit of lifesaving equipment must be provided at every public bathing or swimming facility or natural bathing place. One unit of lifesaving equipment consists of:
- (a) A rescue tube or a ring buoy with a minimum outside diameter of 20 inches (50 centimeters) to which there must be attached a length of 1/4-inch (0.6-centimeter) rope, not less than 1 1/2 times the maximum width of the pool or swimming area; and
- (b) A life pole or shepherd's crook type of pole with minimum handle length of 12 feet (3.7 meters).
- 2. One unit is presumed to be adequate for 2,000 square feet (185.8 square meters) of pool or swimming area, and one additional unit must be provided for each additional 2,000 square feet (185.8 square meters), or major fraction thereof of pool or swimming area.
- 3. Lifesaving equipment must be mounted in conspicuous places, distributed around the edge of the pool or swimming area, at lifeguard chairs or elsewhere, ready for use, its function plainly marked and kept in repair and ready condition. Bathers or others must not be permitted to tamper with lifesaving equipment, use it for any purpose other than its intended use or remove it from its established location.
- 4. Every public bathing or swimming facility and natural bathing place must be equipped with:
  - (a) A standard first-aid kit, filled, ready for use and readily accessible for emergency use; and
  - (b) Two or more blankets reserved for emergency use.

[Bd. of Health, Public Bathing Places Reg. Art. 37, eff. 5-21-74]—(NAC A 11-1-88)

NAC 444.268 Posting information on artificial respiration and emergency services. (NRS 439.200, 444.070) Diagrammatic illustrations of artificial respiration procedures must be posted at all public bathing or swimming facilities where they are clearly visible from the nearby deck and protected from the elements. Except as otherwise provided in this section, the location and telephone number of the nearest ambulance, hospital, fire or police rescue service, physician and facility operator must be kept similarly posted together with instructions that, in case of need, manual or mouth-to-mouth artificial respiration should be started immediately and continued until a physician arrives or mechanical resuscitators are applied. A telephone must be located in the vicinity of the pool enclosure, but outside of the enclosure. In lieu of the emergency telephone numbers described in this section, the number for the emergency 911 service may be posted if that emergency service is available in the geographical area of the public bathing or swimming facility.

[Bd. of Health, Public Bathing Places Reg. Art. 38 § 38.8, eff. 5-21-74]—(NAC A 11-1-88; 1-16-96)

#### NAC 444.270 Presence of lifeguards. (NRS 439.200, 444.070, 444.080)

1. Except as otherwise provided in subsection 2, any public bathing or swimming facility, except an isolation and flotation tank, spray pool, or a mineral bath, therapeutic pool or similar facility, must have a lifeguard on duty when the facility is open for use unless it is a swimming pool and all of the following conditions are met:

- (a) The pool is operated solely for and in conjunction with a hotel, motel or other place of lodging, or a trailer park, apartment, condominium or other facility containing multiple dwellings.
  - (b) The pool has a surface area of less than 2,000 square feet (185.8 square meters).
  - (c) There is no fee charged, whether direct or indirect, for the use of the pool.
- (d) The use of the pool is limited to the registered guests, tenants or residents of the place of lodging or facility containing multiple dwellings and their guests.
- 2. Except as otherwise provided in this subsection, lifeguards are not required for a swimming pool that is not open to the general public and is owned jointly by all the residents of a development or by a homeowner's association in which all of the members are residents. The owners of such a pool shall submit to the health authority written procedures for the supervision of bathers. The health authority must approve the procedures in writing before an operating permit for the pool may be issued. A lifeguard must be on duty if the number of people in such a pool exceeds 80 percent of the maximum number of people allowed in the pool.
- [Bd. of Health, Public Bathing Places Reg. Art. 38 §§ 38.3-38.4.3 & 38.9, eff. 5-21-74]—(NAC A 9-17-82; 11-1-88)
- NAC 444.272 Number of lifeguards required. (NRS 439.200, 444.070) If lifeguard service is provided at a public bathing or swimming facility, the number of lifeguards must be adequate to maintain continuous surveillance over the bathers. At no time may there be fewer lifeguards than guard stations if there are more than 75 persons bathing or swimming at the facility.

[Bd. of Health, Public Bathing Places Reg. Art. 38 § 38.6, eff. 5-21-74]—(NAC A 11-1-88)

# NAC 444.274 Qualifications, duties and identification of lifeguards. (NRS 439.200, 444.070, 444.115)

- 1. Lifeguards at a public bathing or swimming facility must have satisfactorily completed a Red Cross Advanced Lifesaving Course or the equivalent.
- 2. Lifeguards must be in full charge and must have the authority to enforce all rules and regulations pertaining to sanitation and safety.
- 3. Lifeguards on duty must not be subject to duties which will interfere with their supervision of bathers.
- 4. Lifeguards shall wear distinguishing suits or emblems, so that they may be easily identified by persons using the facility.
- [Bd. of Health, Public Bathing Places Reg. Art. 38 §§ 38.5-38.5.3, eff. 5-21-74]—(NAC A 7-23-82; 11-1-88)
- NAC 444.276 Notices when lifeguards not provided. (NRS 439.200, 444.070) If no lifeguard service is provided, a warning sign must be placed in plain view for all bathers and must state "Warning No Lifeguard on Duty" with clearly legible letters, at least 4 inches (10 centimeters) in height. In addition, the sign must state "Children Under 14 Years Old Should Not Use Facility Without An Adult in Attendance," and "Solo Bathing is Prohibited."

[Bd. of Health, Public Bathing Places Reg. Art. 38 § 38.7, eff. 5-21-74]—(NAC A 11-1-88)

## NAC 444.278 Capacity. (NRS 439.200, 444.070)

1. For the purpose of determining the capacity of any pool in a public bathing or swimming facility, those portions of the pool less than 5 feet (1.52 meters) deep or from the breakpoint to

the shallow end is designated as the "nonswimming" area and the portion of the pool more than 5 feet (1.52 meters) deep or from the breakpoint to the deep end is designated as the "swimming" area.

2. The maximum number of bathers permitted within the pool enclosure at one time must be based on the following formula:

$$\frac{\text{Maximum}}{\text{Bathing Load}} = \frac{\text{Nonswimming Area (ft.}^2)}{10} + \frac{\text{Swimming Area (ft.}^2)}{24}$$

- 3. The health authority may make additional allowance in cases of facilities with extensive deck areas used by patrons for lounging or sunbathing.
- 4. The maximum number of bathers permitted within the pool enclosure must be posted at each facility. The number must be based on the area of the facility or on the sanitary facilities which are provided. The most restrictive regulation applies.
- 5. The owner of the facility is responsible for seeing that the maximum capacity is not exceeded.

[Bd. of Health, Public Bathing Places Reg. Art. 19, eff. 5-21-74]—(NAC A 11-1-88)

## NAC 444.280 Bathers: Requirements; prohibitions. (NRS 439.200, 444.070)

- 1. All bathers at a public bathing or swimming facility shall take a cleansing shower using warm water and soap and shall thoroughly rinse off all soap suds before entering or reentering the pool enclosure.
  - 2. Persons not dressed for bathing must not be allowed in the pool.
- 3. Persons suffering from colds, fever, coughs, sore or inflamed eyes, any skin disease or any communicable disease or open sores or bandages must be excluded from the facility.
- 4. Spitting, soiling, or in any way contaminating the water, walkways, or dressing room floors in the facility must be prohibited.
- 5. Except as otherwise provided in <u>NAC 444.288</u>, eating, drinking and smoking within the pool enclosure are prohibited.
- 6. Bringing or throwing into the water or onto walkways any objects that may in any way carry contamination, endanger safety of bathers or produce unsightliness must be prohibited.
- 7. No boisterous or rough play may be permitted in the water, on the walkways, diving boards, floors or platforms, or in the dressing rooms or showers.
  - 8. Persons under the influence of liquor must not be permitted in or about the facility.
- 9. Public bathing or swimming facilities are for use of people only; animals must be excluded from the pool and enclosure.

[Bd. of Health, Public Bathing Places Reg. Art. 39 §§ 39.1-39.6, 39.8 & 39.9, eff. 5-21-74]—(NAC A 11-1-88)

NAC 444.282 Bathers: Failure to comply with rules and regulations. (NRS 439.200, 444.070) Any person who refuses to comply with any regulation governing a public bathing or swimming facility or any rule of that facility must be excluded from the premises, and the management shall promptly bring any action which may be necessary to prosecute or eject from the premises any such person.

[Bd. of Health, Public Bathing Places Reg. Art. 39 § 39.7, eff. 5-21-74]—(NAC A 11-1-88)

#### NAC 444.284 Swimming suits and towels. (NRS 439.200, 444.060)

- 1. Swimming suits and towels furnished by the management, unless sent to a public laundry, must be washed with hot water and soap or detergent, rinsed and thoroughly dried and sterilized by heat each time they are used, or an equivalent, approved process must be used.
- 2. Clean swimming suits and towels must not be permitted to come in contact with unwashed suits and towels or be stored on shelves or in baskets which have been used for storing dirty swimming suits and towels.
- 3. Clean suits and towels must not be issued at the same counters where dirty towels and suits are returned.

[Bd. of Health, Public Bathing Places Reg. Art. 41 §§ 41.1-41.2.1, eff. 5-21-74]

**NAC 444.286 Bathing caps.** (NRS 439.200, 444.070) Any person with long hair who uses a public bathing or swimming facility shall wear an acceptable bathing cap if required to do so by the management of the facility. The use of common bathing caps is prohibited.

[Bd. of Health, Public Bathing Places Reg. Art. 41 § 41.3, eff. 5-21-74]—(NAC A 11-1-88)

**NAC 444.288 Food and drinks.** (NRS 439.200, 444.070) Food or drinks are not permitted in a public bathing or swimming facility, except in the visitor area or in areas which have been approved by the health authority for food or drinks.

[Bd. of Health, Public Bathing Places Reg. Art. 40, eff. 5-21-74]—(NAC A 9-17-82; 11-1-88)

**NAC 444.290 Spectators and nonbathers.** (NRS 439.200, 444.070) Except as otherwise provided in this section, spectators and nonbathers must be excluded from the toilet rooms provided for the persons using a public bathing or swimming facility. If the management desires to accommodate spectators and nonbathers, they must be provided with separate toilet facilities. An exception to the requirements of this section may be granted if, in the opinion of the health authority, the toilet facilities provided for bathers are also adequate to accommodate spectators and nonbathers.

[Bd. of Health, Public Bathing Places Reg. Art. 42 § 42.6, eff. 5-21-74]—(NAC A 11-1-88)

#### Violations

**NAC 444.300 Notice of violation.** (NRS 439.200, 444.070) If the health authority inspects a public bathing or swimming facility or natural bathing place and finds a violation of any provision of NAC 444.010 to 444.306, inclusive, that does not seriously endanger the public health, the health authority shall issue a written notice of the violation to the owner or his or her representative and allow a reasonable time for the violation to be corrected.

[Bd. of Health, Public Bathing Places Reg. Art. 4 § 4.1, eff. 5-21-74]—(NAC A 11-1-88)

# NAC 444.302 Suspension or denial of operating permit. (NRS 439.200, 444.070, 444.080, 444.100)

- 1. The health authority may order a suspension of an operating permit and may order the owner or operator of a public bathing or swimming facility or natural bathing place to prohibit any person from using it if the health authority finds:
- (a) A failure of the equipment, structure, area or enclosure of the facility or bathing place which jeopardizes the health or safety of the persons using or operating it.
- (b) That the facility or bathing place lacks properly functioning equipment or proper material for recirculating, treating or testing the water used for swimming or bathing.

- (c) A lack of required supervisory personnel or required lifeguards.
- (d) That the operator of the facility or bathing place is not maintaining the required water quality.
  - (e) That the operator does not possess a valid operating permit.
- 2. The health authority may deny an application for an operating permit if the applicant fails to:
  - (a) Notify the health authority before construction and completion of the facility;
  - (b) Allow inspection of the facility during or after its construction; or
- (c) Follow any of the requirements set forth in <u>NRS 444.065</u> to <u>444.120</u>, inclusive, and <u>NAC 444.010</u> to <u>444.306</u>, inclusive.

[Bd. of Health, Public Bathing Places Reg. Art. 4 §§ 4.2-4.2.5, eff. 5-21-74]—(NAC A 11-1-88; 10-30-97)

## NAC 444.304 Order for closure; revocation of suspended permit. (NRS 439.200, 444.070, 444.100)

- 1. If the health authority orders the closing of a public bathing or swimming facility or natural bathing place, the health authority shall issue a written order to the owner or operator of the facility or bathing place, or his or her representative, stating with particularity the reason for the order of closure along with his or her finding that the condition giving rise to the order represents a serious threat to the public health and safety.
- 2. The order must state that the facility or bathing place is to be closed immediately and must specify the corrective action necessary before the facility or bathing place may be reopened for use.
- 3. The order must be served upon the owner, operator, representative or a person in charge of the facility or bathing place. The person on whom the order is served shall close the facility or bathing place immediately and shall prohibit any person from using it.
- 4. If the order is served upon a person whose operating permit is suspended, the health authority may take appropriate action to revoke the operating permit unless the operator:
  - (a) Closes the facility or bathing place immediately; and
  - (b) Takes any corrective action required by the order within the time therein specified.
- [Bd. of Health, Public Bathing Places Reg. Art. 4 § 4.3, eff. 5-21-74]—(NAC A 11-1-88; 10-30-97)

# NAC 444.305 Procedure for review of actions taken by Health Division; appeals. (NRS 439.200, 444.070, 444.100)

- 1. A person who has reason to believe that an action taken by the Health Division pursuant to <u>NAC 444.010</u> to <u>444.306</u>, inclusive, is incorrect or based on inadequate knowledge may, within 10 business days after receiving notice of the action, request an informal discussion with the employee responsible for the action and the immediate supervisor of the employee.
- 2. If the informal discussion does not resolve the problem, the aggrieved person may, within 10 business days after the date scheduled for the informal discussion, submit a written request to the Bureau for an informal conference. The informal conference must be scheduled for a date, place and time mutually agreed upon by the aggrieved person and the Bureau, except that the informal conference must be held no later than 60 days after the date on which the Bureau received the written request.

- 3. Except as otherwise provided in subsection 4, the determination of the Bureau resulting from the informal conference cannot be appealed and is the final remedy available to the aggrieved person.
- 4. An applicant for or holder of a permit or license issued pursuant to NAC 444.010 to 444.306, inclusive, who is aggrieved by an action of the Health Division relating to the denial of an application for or renewal of such a permit or license or the suspension or revocation of such a permit or license may appeal that action in accordance with NAC 439.300 to 439.395, inclusive, after exhausting the informal procedures set forth in this section, except that the Bureau may waive the informal procedures, or any portion thereof, by giving written notice to the aggrieved person.
- 5. As used in this section, "Bureau" means the Bureau of Health Protection Services of the Health Division or its successor.

(Added to NAC by Bd. of Health, eff. 10-30-97)

## NAC 444.306 Reinspection. (NRS 439.200, 444.070, 444.100)

- 1. After the specified corrective action has been taken, the owner or operator or his or her representative shall notify the health authority that the facility or bathing place is ready for reinspection.
- 2. If upon reinspection the corrective action is approved, the health authority shall order the reinstatement of the operating permit, at which time the facility or bathing place may be opened for use.
- 3. If upon reinspection the corrective action is not approved, the operating permit remains suspended and the facility or bathing place must be kept closed and out of use until corrective action is approved.
- [Bd. of Health, Public Bathing Places Reg. Art. 4 §§ 4.4-4.6, eff. 5-21-74]—(NAC A 11-1-88)

#### **PUBLIC SPAS**

#### **General Provisions**

**NAC 444.310 Definitions.** (NRS 439.200, 444.070) As used in NAC 444.310 to 444.546, inclusive, unless the context otherwise requires, the words and terms defined in NAC 444.315 to 444.416, inclusive, have the meanings ascribed to them in those sections.

(Supplied in codification; A by Bd. of Health, 11-2-88; 1-16-96; 10-30-97)

**NAC 444.315 "Air induction system" defined.** (NRS 439.200, 444.070) "Air induction system" means a system activated by a separate air power unit or blower which forces air into hollow ducting built into the spa floor, bench or other part of the spa.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.1, eff. 11-27-79]

NAC 444.317 "Antivortex drain" defined. (NRS 439.200, 444.070) "Antivortex drain" means a drain having a raised cover designed to prevent or minimize any suctioning effect on a person that has come into contact with the drain.

(Added to NAC by Bd. of Health, eff. 11-2-88)

**NAC 444.318 "Approved" defined.** (NRS 439.200, 444.070) "Approved" means acceptable to the health authority based upon a determination concerning conformance with appropriate standards and good public health practices.

(Added to NAC by Bd. of Health, eff. 11-2-88)

**NAC 444.320 "Bather" defined.** (NRS 439.200, 444.070) "Bather" means any person using the spa and adjoining deck area for the purpose of therapy, water sports or related activities.

[Bd. of Health, Public Spa Reg. Art. 1, § 1.2, eff. 11-27-79]

**NAC 444.330 "Deck" defined.** (NRS 439.200, 444.070) "Deck" means the unobstructed area around the perimeter of a spa which is specifically used by bathers.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.3, eff. 11-27-79]—(NAC A 11-2-88)

**NAC 444.340 "Health authority" defined.** (NRS 439.200, 444.070) "Health authority" means officers and agents of the Health Division or of the local boards of health.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.4, eff. 11-27-79]

**NAC 444.345 "Hydrojet" defined.** (NRS 439.200, 444.070) "Hydrojet" means a fitting which blends air and water creating a high velocity turbulent stream of air and water.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.5, eff. 11-27-79]

**NAC 444.347 "Hydrojet pump system" defined.** (NRS 439.200, 444.070) "Hydrojet pump system" means a system in which one or more hydrojets are activated by the use of a pump which is completely independent of the filtration and heating system of the spa.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.6, eff. 11-27-79]

**NAC 444.350 "Ladder" defined.** (NRS 439.200, 444.070) "Ladder" means a series of vertically separated treads or rungs connected by vertical rail members or independently fastened to a vertical spa wall.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.17.1, eff. 11-27-79]

**NAC 444.353 "Multiport valve" defined.** (NRS 439.200, 444.070) "Multiport valve" means a separate switching valve that has a separate position for each of the various filter operations and that combines in one unit the functions of two or more direct-flow valves.

(Added to NAC by Bd. of Health, eff. 11-2-88)

**NAC 444.355 "Nonslip surface" defined.** (NRS 439.200, 444.070) "Nonslip surface" means a surface which is designed to reduce or prevent slipping of bare feet.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.7, eff. 11-27-79]

**NAC 444.360 "NTU" defined.** (NRS 439.200, 444.070) "NTU" means nephelometric turbidity units, a measure of water clarity.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.8, eff. 11-27-79]

**NAC 444.365 "Overflow system" defined.** (NRS 439.200, 444.070) "Overflow system" means perimeter-type overflows, surface skimmers, and surface water collection systems of various design and manufacture.

NAC 444.370 "Person" defined. (NRS 439.200, 444.070) "Person" includes governmental agencies.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.10, eff. 11-27-79]

**NAC 444.375 "Plastic" defined.** (NRS 439.200, 444.070) "Plastic" means any of numerous organic, synthetic, or processed materials which are composed mostly of thermoplastic or thermosetting polymers of high molecular weight and which can be molded, cast, or extruded at some stage in manufacture or in processing into finished articles or objects, or can be shaped by flow.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.11, eff. 11-27-79]

**NAC 444.380 "Prefabricated spa" defined.** (NRS 439.200, 444.070) "Prefabricated spa" means a public spa that has been designed by a licensed professional engineer to be fabricated at a factory into a packaged unit consisting of all of the required components for a public spa, with construction on-site consisting mainly of assembling the components.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.12, eff. 11-27-79]—(NAC A 1-16-96)

### NAC 444.385 "Public spa" defined. (NRS 439.200, 444.070)

- 1. "Public spa" means any spa operated by any person, whether owner, lessee, operator, licensee or concessionaire, for the use of the public or the membership of an organization, whether or not a fee is charged for its use.
- 2. The term does not include spas at single-family private residences which are controlled by the homeowner, the use of which is limited to swimming or bathing by members of the family or invited guests.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.13, eff. 11-27-79]

NAC 444.390 "Ramp" defined. (NRS 439.200, 444.070) "Ramp" means a sloping floor, walk or roadway leading from one level to another, or leading to the spa edge and having a maximum slope of 1:12.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.14, eff. 11-27-79]

**NAC 444.395 "Recessed steps" defined.** (NRS 439.200, 444.070) "Recessed steps" means a riser and tread or a series of risers and treads extending down into the deck with the bottom riser and tread ending at the spa wall, creating a stair well.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.17.2, eff. 11-27-79]

NAC 444.397 "Recessed treads" defined. (NRS 439.200, 444.070) "Recessed treads" means a series of vertically spaced cavities in the spa wall creating tread areas for stepholes.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.17.3, eff. 11-27-79]

#### NAC 444.398 "Remodel" defined. (NRS 439.200, 444.070)

- 1. "Remodel" means to replace all or part of any structure, circulation system or appurtenance of a public bathing or swimming facility or to modify it to the extent that its design, configuration or operating characteristics differ in any respect from those of the original.
- 2. The term does not include normal maintenance and repair or the replacement of equipment that has previously been approved unless the result of the maintenance or repair is

that the type, size or operating characteristics of the equipment are substantially different from those of the original.

(Added to NAC by Bd. of Health, eff. 11-2-88)

**NAC 444.399** "Slip resistant" defined. (NRS 439.200, 444.070) "Slip resistant" means a finish or textured surface designed to prevent or reduce slipping by bare skin in contact with it under wet conditions.

(Added to NAC by Bd. of Health, eff. 11-2-88)

## NAC 444.400 "Spa" defined. (NRS 439.200, 444.070)

- 1. "Spa" means a pool primarily designed for therapeutic use which is not drained, cleaned or refilled for each user.
- 2. The term includes units which employ hydrojet circulation, hot water, cold water, mineral water, air induction bubbles or combinations of them.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.15, eff. 11-27-79]

NAC 444.403 "Spa enclosure" defined. (NRS 439.200, 444.070) "Spa enclosure" means an effective barrier for excluding unauthorized persons from the spa area and the area inside of the fence or barrier surrounding the spa.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.16, eff. 11-27-79]

**NAC 444.405 "Stairs" defined.** (NRS 439.200, 444.070) "Stairs" means a riser and tread or a series of risers and treads extending down from the deck into the spa.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.17.4, eff. 11-27-79]

**NAC 444.407 "Steps" defined.** (NRS 439.200, 444.070) "Steps" means stairs or ladders designed to permit entry and exit to and from the spa.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.17, eff. 11-27-79]

**NAC 444.410 "Toxic" defined.** (NRS 439.200, 444.070) "Toxic" means a quality which might produce an adverse physiological effect on a person.

[Bd. of Health, Public Spa Reg. Art. 1 § 1.18, eff. 11-27-79]

## **NAC 444.415 "Waterline" defined.** (NRS 439.200, 444.070) "Waterline" means:

- 1. Where a skimmer system is in use, the midpoint of the operating range of the skimmer.
- 2. Where an overflow system is in use, the height of the overflow rim.

[Bd. of Health, Public Spa Reg. Art. 1 §§ 1.19-1.19.2, eff. 11-27-79]

**NAC 444.416 "Wet deck area" defined.** (NRS 439.200, 444.070) "Wet deck area" means the 4-foot-wide unobstructed area outside a spa's or pool's water perimeter, curb, diving boards, diving towers or pool sides.

(Added to NAC by Bd. of Health, eff. 11-2-88)

#### NAC 444.417 Applicability. (NRS 439.200, 444.070)

1. The provisions of <u>NAC 444.310</u> to <u>444.546</u>, inclusive, referring to construction or modifications apply to all public spas constructed on or after November 27, 1979, and to any other public spa, where, in the opinion of the health authority, enforcement of those provisions is necessary to eliminate a condition hazardous to health or safety.

2. The provisions of <u>NAC 444.310</u> to <u>444.546</u>, inclusive, pertaining to maintenance and sanitation apply to all public spas.

[Bd. of Health, Public Spa Reg. Art. 31, eff. 11-27-79]

NAC 444.419 Severability. (NRS 439.200, 444.070) If any provision of NAC 444.310 to 444.546, inclusive, is declared unconstitutional or invalid for any reason, the remainder of the provisions of those sections are not intended to be affected thereby.

[Bd. of Health, Public Spa Reg. Art. 32, eff. 11-27-79]

#### **Preliminary Requirements**

# NAC 444.420 Application; plans, specifications and descriptive material. (NRS 439.200, 444.070, 444.080)

- 1. Any person who desires to construct a public spa or modify or add to an existing public spa or alter its equipment must apply in writing to the health authority on forms furnished by the health authority, giving the name of the bathing place and its location together with such other information as may be required. The application must be accompanied by plans, specifications and supporting data.
- 2. Plans and specifications for spas which are not prefabricated must have been prepared by a professional engineer who is registered in this State, an architect who is registered in this State, or a licensed contractor who holds a classification A license with an A-10 subclassification issued by the State Contractors' Board. A licensed professional engineer or a registered architect shall include his or her seal and signature on any plans and specifications submitted to the health authority. A licensed contractor shall include his or her signature on any plans and specifications submitted to the health authority.
- 3. The plans must be drawn to scale, include a north arrow, and be accompanied by proper specifications to permit a comprehensive engineering review. The plans must include:
- (a) A plot plan and sectional views with all necessary dimensions of the spa and surrounding area.
- (b) A piping diagram showing all plumbing, including treatment facilities with pertinent elevation data, in sufficient detail to permit a hydraulic analysis of the system.
- (c) An electrical diagram showing the method of grounding and other pertinent details, which must show lighting and other electrical systems.
- (d) Detailed plans of the bathhouse, equipment rooms, dressing rooms, toilet facilities, showers, and other spa structures and facilities.
- (e) A hydraulic analysis completed by the applicant or his or her representative and submitted to the health authority on a form provided by the health authority.
- 4. Leaflets, catalogs or other descriptive material must be furnished when mechanical equipment is specified by trade name, catalog number or any other designation which identifies the equipment, rather than by specification. This material will be returned to the applicant upon his or her request after the review of the plans has been completed.
- 5. The plans must be complete. The plans and specifications must be submitted in triplicate or as otherwise required.
  - 6. The submitted plans must be approved in writing before any construction is undertaken. [Bd. of Health, Public Spa Reg. Art. 2 §§ 2.1-2.1.5.6, eff. 11-27-79]—(NAC A 1-16-96)

# NAC 444.422 Changes in plans; review of plans; structural adequacy. (NRS 439.200, 444.070, 444.080)

- 1. Public spa facilities must be built in accordance with the plans as approved, unless prior approval of any changes is obtained in writing from the health authority.
- 2. The review of the plans by the health authority will not include review of structural design or structural stability of any part of a public spa. Certification of structural adequacy is the responsibility of the design engineer, architect, licensed contractor or the manufacturer.
  - 3. The health authority shall review the plans within 30 days after receiving them. [Bd. of Health, Public Spa Reg. Art. 2 §§ 2.2-2.3, eff. 11-27-79]

## NAC 444.424 Inspections. (NRS 439.200, 444.070, 444.090)

- 1. The owner, or his or her agent, shall notify the health authority at specific predetermined stages of construction and at the time of completion of the public spa to permit inspection of the public spa and related equipment during and after construction.
- 2. In areas of the State where the health authority cannot provide the inspection and where local government does not require building inspections, the owner or his or her agent may be required to hire an independent inspector. The independent inspector may be selected by the owner or his or her agent upon the approval of the health authority.
- 3. No public spa may be placed in operation until such inspections show compliance with the requirements of NAC 444.310 to 444.512, inclusive.

[Bd. of Health, Public Spa Reg. Art. 2 §§ 2.4-2.4.3, eff. 11-27-79]

#### **Construction of Spa**

NAC 444.428 Adoption of Standards by reference. (NRS 439.200, 444.070) The State Board of Health adopts by reference NSF International Standards 14, "Plastic Piping Components and Related Materials," 50, "Circulation System Components for Swimming Pools, Spas/Hot Tubs" and 61, "Drinking Water System Components-Health Effects." A copy of the Standards may be purchased from the NSF International, P.O. Box 130140, Ann Arbor, Michigan 48113. The cost of Standard 14 is \$40. The cost of Standard 50 is \$45. The cost of Standard 61 is \$65.

(Added to NAC by Bd. of Health, eff. 11-2-88; A 1-16-96)

NAC 444.429 Use of equipment and materials not approved by NSF International. (NRS 439.200, 444.070) The health authority may permit the use of equipment and materials which are not designated by the NSF International as complying with the Standards adopted pursuant to NAC 444.428 if the health authority determines that the equipment and materials comply with standards equivalent to the NSF International Standards.

(Added to NAC by Bd. of Health, eff. 1-16-96)

NAC 444.430 Shape. (NRS 439.200, 444.070) The shape of any public spa must be such that the circulation of the water will not be impaired.

[Bd. of Health, Public Spa Reg. Art. 11 § 11.1, eff. 11-27-79]

## NAC 444.432 Depth. (NRS 439.200, 444.070)

1. The maximum water depth for a public spa is 4 feet (1.22 m), measured from the waterline. Exceptions may be made by the health authority for spas designed for special purposes such as instruction, treatment and therapy.

2. The maximum depth for any seat or sitting bench in a public spa is 2 feet (61 cm) measured from the waterline.

[Bd. of Health, Public Spa Reg. Art. 11 §§ 11.2 & 11.3, eff. 11-27-79]

**NAC 444.434 Depth markings.** (NRS 439.200, 444.070) Spas must have permanent depth markings plainly and conspicuously posted and located as follows:

- 1. The maximum water depth must be clearly marked.
- 2. Depth markings must be positioned within 18 inches (46 cm) of the water's edge.
- 3. Depth markings must be positioned to be read while standing on the deck facing the water.
  - 4. There must be at least two depth markings per spa regardless of spa size or shape. [Bd. of Health, Public Spa Reg. Art. 28 §§ 28.2-28.2.4, eff. 11-27-79]
- **NAC 444.436 Slope.** (NRS 439.200, 444.070) The slope of the spa floor must not exceed 1 foot (30.50 cm) of fall in 12 feet (3.66 m).

[Bd. of Health, Public Spa Reg. Art. 11 § 11.5, eff. 11-27-79]

#### NAC 444.438 Materials. (NRS 439.200, 444.070)

- 1. Materials used in components and accessories used in and around public spas must not be hazardous to humans or to the environment in which the spa is installed. These materials must be capable of fulfilling the requirements of design, installation and intended use.
- 2. All materials and accessories to be used in and around public spas must be selected to ensure that all parts with external surfaces and edges which might come in contact with a bather are assembled, arranged and finished so that they will not constitute a hazard to the health or safety of children or adults who are using the spa for its intended purpose.
  - 3. Wood may not be used as a material, component or accessory in public spas. [Bd. of Health, Public Spa Reg. Art. 7, eff. 11-27-79]—(NAC A 11-2-88)

#### NAC 444.440 Structural design. (NRS 439.200, 444.070)

- 1. The structural design and materials used in constructing a public spa must meet generally accepted structural engineering practice and provide a sound, durable structure which will safely sustain all the dead loads, live loads, liquid, hydrostatic and earth pressures involved. The spa must be watertight and the surfaces must be inert, nontoxic, smooth and easily cleaned, and should be light in color.
- 2. The strength of the assembled or installed components and accessories used in and around a public spa must be such that no structural failure of any component part can cause the failure of any other part.

[Bd. of Health, Public Spa Reg. Art. 8 §§ 8.1 & 8.2, eff. 11-27-79]

### NAC 444.442 Steps, ladders, treads and handrails required. (NRS 439.200, 444.070)

- 1. Spa steps, ladders or recessed treads must be provided when the spa is more than 2 feet (61 cm) deep.
- 2. A spa must be equipped with at least one handrail (or ladder equivalent) for each 50 feet (15.25 m) of perimeter or portion thereof, to designate the point or points of entry and exit.

[Bd. of Health, Public Spa Reg. Art. 12 §§ 12.1 & 12.2, eff. 11-27-79]

NAC 444.444 Spa steps and recessed steps. (NRS 439.200, 444.070) Where required, spa steps and recessed steps must meet the following specifications:

- 1. Step treads must have a minimum unobstructed horizontal tread depth of 10 inches (25.40 cm) and a minimum width of 12 inches (30.48 cm). Step treads must have slip-resistant surfaces.
- 2. Step risers must not be less than 7 inches (17.78 cm) high nor more than 1 foot (30.48 cm) high. When the bottom tread serves as a bench or seat, the bottom riser must be no more than 1 foot 2 inches (35.56 cm) high. The first and last risers need not be uniform in height, but must comply with the requirements of this subsection. The height of the top riser must be measured from the finished deck. Risers between the first and last risers must be uniform in height.
- 3. The horizontal edge of a step, seat or bench tread must be constructed of a material which contrasts with the color of the steps, and must be clearly visible and evident to bathers. The contrasting material on the horizontal edge must be at least 2 inches (5 cm) wide.
- 4. The outside edge of handrails placed to assist bathers to leave the spa must be located not more than 1 foot 9 inches (53.34 cm) or less than 1 foot 3 inches (38.10 cm) from a line drawn vertically from the bottom riser, away from the spa wall.
  - 5. Seats or benches may be provided as part of the steps.

[Bd. of Health, Public Spa Reg. Art. 12 §§ 12.3 & 12.3.1-12.3.9, eff. 11-27-79]—(NAC A 11-2-88)

NAC 444.446 Recessed treads. (NRS 439.200, 444.070) Recessed treads, when provided, must meet the following specifications:

- 1. Stepholes must be:
- (a) Uniformly spaced, not more than 1 foot (30.48 cm) nor less than 7 inches (17.48 cm) apart at the centerline.
  - (b) At least 5 inches (12.70 cm) deep and at least 1 foot (30.48 cm) wide.
  - 2. Stephole treads must be sloped to drain into the spa to prevent accumulation of dirt.
- 3. The vertical distance between the spa coping edge and the uppermost recessed tread must be 1 foot (30.48 cm) or less.
- 4. Each set of recessed treads must be provided with two handrails which fully serve all treads and risers.

[Bd. of Health, Public Spa Reg. Art. 12 §§ 12.5-12.5.5, eff. 11-27-79]

**NAC 444.448 Ladders.** (NRS 439.200, 444.070) Where required, ladders must meet the following specifications:

- 1. Spa ladders must be made entirely of corrosion-resistant materials.
- 2. Ladder treads must have slip-resistant surfaces.
- 3. Ladder designs must provide two handholds or handrails which fully serve all treads. The outside diameter of handrails must not be more than 1.9 inches (4.83 cm) or less than 1 inch (2.54 cm).
- 4. The clearance between a ladder and the spa wall must be not more than 6 inches (15.24 cm) nor less than 3 inches (7.62 cm).

[Bd. of Health, Public Spa Reg. 12 §§ 12.4-12.4.5, eff. 11-27-79]

NAC 444.450 Handholds. (NRS 439.200, 444.070)

- 1. A public spa must be provided with suitable handholds around the perimeter in areas where the spa is more than 3 feet 6 inches (1.07 m) deep, measured from the deepest point of the spa floor to the waterline.
- 2. Handholds must be spaced no farther apart than 4 feet (1.22 m) and must be provided with a suitable, slip-resistant surface.
  - 3. Handholds may be:
- (a) Ledges, radiused flanges, or cantilevered decks along the immediate top edge of the spa, located not more than 1 foot (30.50 cm) above the waterline.
- (b) A rope or railing placed not more than 1 foot (30.50 cm) above the waterline, fastened to the spa wall.
  - (c) Ladders, steps and seat ledges.
  - (d) A combination of the handholds listed in this section.
  - 4. The overhang for coping or cantilevered decking:
  - (a) Must not exceed 2 inches (5.08 centimeters) or be less than 1 inch (2.54 centimeters).
- (b) Must not exceed 2 1/2 inches (6.4 centimeters) in thickness for a spa for which an operating permit has been issued before January 16, 1996.
- (c) Must not exceed 3 1/2 inches (8.89 centimeters) in thickness for a spa for which an operating permit is issued on or after January 16, 1996.
- [Bd. of Health, Public Spa Reg. Art. 11 §§ 11.4-11.4.4, eff. 11-27-79]—(NAC A 11-2-88; 1-16-96)

### NAC 444.452 Miscellaneous requirements. (NRS 439.200, 444.070)

- 1. The surface finish of all public spas, including the bottom and sides, should be light-colored material and must present a smooth surface which can be easily cleaned and which has no cracks, openings, seams or expansion joints.
- 2. The finished trim dimension tolerances for prefabricated units must be the manufacturer's stated "rough-in" dimensions  $\pm 1/2$  inch ( $\pm 1.27$  cm).
- 3. Each prefabricated spa must be supplied by the manufacturer with a copy of the manufacturer's written installation instructions affixed to the spa in a conspicuous place.
- 4. Each prefabricated spa must be supplied with a copy of the manufacturer's written care and maintenance instructions affixed to the unit in a conspicuous place.
- 5. The manufacturer's name, trademark, or both, must be permanently and legibly marked on each prefabricated spa so that it is visible after installation.
  - [Bd. of Health, Public Spa Reg. Art. 6, eff. 11-27-79]

#### NAC 444.454 Decks: Dimensional design. (NRS 439.200, 444.070)

- 1. A continuous unobstructed deck at least 4 feet (1.22 m) wide, including the coping, must be provided around at least half of the perimeter of the spa. Deck and wall junctures must be coved with a minimum of 4 inches (10.16 cm). Decks elevated above the normal walking level of the area must have protective safety barriers at the edge as required by NAC 444.463.
- 2. Risers of steps for the deck must be uniform and be not less than 3.75 inches (9.53 cm) nor more than 7.75 inches (19.70 cm) high. The minimum tread width is 10 inches (25.40 cm).
- 3. The maximum slope of decks is .5 inch per foot (4.0 cm per meter) except for ramps. Ramps may have a slope of not more than 5 percent.
- 4. The maximum voids between adjoining concrete slabs or between concrete slabs and expansion joint material is .2 inch (.51 cm) of horizontal clearance, with a maximum difference in elevation of .25 inch (.64 cm).

- 5. Joints where spa coping meets concrete deck work must be watertight and must not allow water to seep to the ground beneath. Joints in decks must be provided to prevent cracks which may be hazardous because of differences in elevations, separation of surfaces or movement of the deck.
- 6. Areas where deck work joins concrete work other than the spa must be protected by expansion joints filled with nonrigid material such as mastic to protect the spa from the pressures of relative movements. In the absence of specific local engineering practices, the work must be performed in accordance with recommended practices of the American Concrete Institute.
- 7. Where deck work joins the spa coping, the joining areas must be designed and installed to protect adequately the spa coping and its mortar bed from damage as a result of reasonable movement of adjoining deck work.
- 8. Decks must be edged, radiused or otherwise relieved so as to present no exposed sharp corners.
- 9. Decks must be sloped as required by subsection 3 to drain to perimeter areas or to deck drains. Deck drains must not be greater than 25 feet (7.62 m) apart and must not return water to the recirculation system. Drains must remove spa splash water, deck cleaning water, and rainwater at a rate approximately equal to the rate of arrival without leaving excessive puddles.
- 10. Deck work must be designed and installed in accordance with engineering practices required in the area of installation. This includes, but is not limited to, the design and quality of the subbase when required, concrete mix design, and reinforcing. In the absence of specific local engineering practices, the work must be performed in accordance with recommended practices of the American Concrete Institute.
- [Bd. of Health, Public Spa Reg. Art. 13 §§ 13.4 & 13.7-13.16, eff. 11-27-79]—(NAC A 11-2-88)

#### NAC 444.456 Decks: Surfaces. (NRS 439.200, 444.070)

- 1. Decks, ramps and similar surfaces, including step treads, must be reserved for the use of bathers only, and be slip resistant.
- 2. Roughness or irregularity of slip-resistant surfaces must not cause injury or discomfort under intended use.
- 3. Special features in or on decks, such as depth markings, pool brand insignia or similar markings, must conform to the requirements of <u>NAC 444.454</u> to <u>444.460</u>, inclusive.
- 4. The ground on which any spa structure rests must be adequately compacted to support properly the structure.
- 5. Synthetic deck surfaces must be designed to be slip resistant and comply with requirements set forth by the health authority.
- 6. Wood decks, carpets and other absorbent materials are prohibited in the wet deck area. [Bd. of Health, Public Spa Reg. Art. 13 §§ 13.1-13.3, 13.5 & 13.6, eff. 11-27-79]—(NAC A 11-2-88)
- **NAC 444.458 Hose bibs.** (NRS 439.200, 444.070) One or more hose bibs must be provided within 50 feet (15.24 m) of the facility for use in cleaning the deck area and above, and they must be located so that they do not constitute a safety hazard.
  - [Bd. of Health, Public Spa Reg. Art. 13 § 13.17, eff. 11-27-79]

NAC 444.460 Drinking fountains. (NRS 439.200, 444.070) A drinking fountain must be provided within 100 feet (30.48 m) of the spa where it will be readily accessible from a spa pool. The drinking fountain may be inside or outside the spa pool enclosure.

[Bd. of Health, Public Spa Reg. Art. 13 § 13.18, eff. 11-27-79]

**NAC 444.462 Roofs and canopies.** (NRS 439.200, 444.070) Roofs and canopies over public spas must be constructed so that moisture or condensation from the roof or canopy does not drain into the spa. Roofs and canopies must be constructed so that they blend in with the surroundings and must be acoustically treated.

[Bd. of Health, Public Spa Reg. Art. 8 §§ 8.3 & 8.3.1, eff. 11-27-79]

## NAC 444.463 Enclosures; exclusion of unauthorized persons. (NRS 439.200, 444.070) The holder of a permit to operate a public spa must:

- 1. Establish procedures to exclude unauthorized persons from the spa and spa area.
- 2. Construct a fence, wall, building, enclosure or any combination thereof which completely encloses the spa or pool area and:
  - (a) Is constructed from materials which:
    - (1) Offer no external handholds or footholds.
    - (2) Are impenetrable by small children.
- (b) Has a height of at least 5 feet (1.52 meters) if the facility is operated solely for and in conjunction with lodgings, or a height of a least 6 feet (1.8 meter) if the facility is open to the general public and not operated solely for and in conjunction with lodgings.
  - (c) Has vertical supports spaced no wider than 4 inches (10.16 cm) apart.
- (d) If an opening is provided under the bottom of the enclosure, has an opening no wider than 4 inches (10.16 cm).
- (e) Contains gates and doors equipped with permanent locking devices and self-closing and positive self-latching closure mechanisms at least 3 1/2 feet (1.06 meters) above the deck, walkway or floor and opening into the spa or pool area so that the gates and doors close by themselves and positively latch from any open position.
- → Facilities which have 24-hour-a-day security for the spa or pool area may be exempted from the requirements of this section.

(Added to NAC by Bd. of Health, eff. 11-2-88)

**NAC 444.465 Gates and doors.** (NRS 439.200, 444.070) Gates and doors which open into a spa or pool area must not be blocked open. The self-closing mechanisms or latches on the gates and doors may not be altered so that the gates and doors remain open.

(Added to NAC by Bd. of Health, eff. 11-2-88)

## NAC 444.466 Electrical requirements. (NRS 439.200, 444.070)

- 1. Wiring and grounding of all electrical equipment associated with a spa and the bonding and grounding of all metal parts must meet the *National Electric Code* published by the National Fire Protection Association.
- 2. Area lighting must not be installed directly over the spa water surface. Area lights must be shielded.
  - 3. Underwater lighting may be installed on the bottom step or bench riser only.
- 4. All equipment, fixtures and wiring must bear an appropriate Underwriters Laboratories, Inc., label or the equivalent.

### NAC 444.468 When bathhouses required. (NRS 439.200, 444.070)

- 1. Dressing rooms, toilet facilities and shower rooms are required for all public spas other than those provided in connection with lodging facilities if the spa is reserved for tenants or guests who occupy the lodging facilities. "In connection with lodging facilities" means that the spa is so situated that no bather will have to walk more than 300 feet (91.44 m) to sanitary facilities.
- 2. Where no bathhouse is located within 300 feet (91.44 m) of the spa, there must be a flush toilet, a lavatory and a shower for men, and the same facilities for women, at the spa.

[Bd. of Health, Public Spa Reg. Art. 14 §§ 14.1-14.3, eff. 11-27-79]

## NAC 444.470 Bathhouse facilities. (NRS 439.200, 444.070)

- 1. The entrance and exits of a bathhouse must be screened to break any line of sight from outside.
- 2. Each bathhouse must be provided with separate facilities for each sex with no interconnection between the provisions for male and female bathers.
- 3. Floor surfaces must be reasonably smooth and slope at a rate of .25 inch per foot (2 cm per meter) toward the floor drains. Walls and partitions must be reasonably smooth and be made of durable material. A space of 10 inches to 12 inches (25.40 to 30.48 cm) must be left between the floor and the bottom of partitions forming compartments within dressing, shower and toilet rooms.
- 4. Each bathhouse must be arranged so that patrons, on leaving the dressing rooms, must pass the toilets and go through the showers to get to the spa.
- 5. Showers must be supplied with water at a temperature of at least 90°F (32.22°C) at a rate of 3 gallons per minute (11.34 liters per minute) per shower head. Mixing valves must be installed to prevent scalding of bathers.
  - 6. Each licensee shall provide:
- (a) One water closet for each 75 male bathers or fraction thereof, and one for each 50 female bathers or fraction thereof.
  - (b) One urinal for each 75 male bathers or fraction thereof.
  - (c) One lavatory for each 100 male bathers and one for each 100 female bathers, or fractions.
  - (d) One shower for each 50 male bathers and one for each 50 female bathers, or fractions.
- 7. Lockers, if provided, must be properly vented and set on solid masonry bases at least 4 inches high (10.16 cm) or on legs at least 10 inches (25.40 cm) long.

[Bd. of Health, Public Spa Reg. Art. 14 §§ 14.4-14.11, eff. 11-27-79]

#### NAC 444.472 Ventilation. (NRS 439.200, 444.070)

- 1. Indoor spas, shower rooms, dressing rooms and toilets of public spas must be properly ventilated.
- 2. Ventilation systems for indoor spas must be designed to prevent direct drafts on the bathers.
- 3. There must be at least five air changes per hour in the area in which an indoor spa is located, including spas located adjacent to enclosed swimming pools.
- 4. All interior rooms must be ventilated to the outside and in such a way that they do not remain excessively damp.

[Bd. of Health, Public Spa Reg. Art. 9, eff. 11-27-79]

## NAC 444.474 Supply of water. (NRS 439.200, 444.070)

- 1. The water supply of the spa must be from an approved source and meet the requirements of the Health Division for potable water, except that the health authority may approve the use of natural hot or mineral waters.
- 2. A fillspout, if used, must have an air gap of not less than twice the pipe diameter, or 3 inches (7.62 cm) above the overflow of the spa, whichever is greater, and the fillspout must not protrude more than 2 inches (5.08 cm) beyond the edge of the spa.
  - 3. The fillspout, if used, must be properly shielded so as not to create a hazard.
- 4. A surge tank or receptor may be installed for filling the spa if the spa water will freely overflow at deck level, the top of the surge tank or the top of the receptor before coming in contact with the water supply outlet.

[Bd. of Health, Public Spa Reg. Art. 17 §§ 17.1-17.3, eff. 11-27-79]—(NAC A 11-2-88)

**NAC 444.476 Quality of water.** (NRS 439.200, 444.070) The spa equipment must provide water meeting the following standards:

- 1. The water must be continuously disinfected by a chemical which imparts an easily measured, freely available residual effect. Adequate disinfection may be accomplished by:
  - (a) Normal chlorination 1.0 to 5.00 ppm (1.0 to 5.0 mg/l) of free chlorine at pH 7.0 to 8.0.
  - (b) Chlorinated cyanurate chlorination 1.0 to 5.00 ppm (1.0 to 5.0 mg/l) at pH 7.2 to 8.0.
  - (c) Normal bromination 3.0 to 5.0 ppm (3.0 to 5.0 mg/l) at pH 7.0 to 8.0.
- 2. The health authority may accept another disinfecting material or method when it has been adequately demonstrated to the health authority that it provides a satisfactory residual effect which is easily measured, and that it is otherwise as effective under conditions of use as the chlorine concentration required in this section.
  - 3. The maximum permissible concentration of cyanuric acid is 100 ppm (100 mg/l).
- 4. The total alkalinity should be within the range of 80 to 120 ppm (80 to 120 mg/l), but alkalinity must not exceed 150 ppm (150 mg/l).
- 5. The chemical quality of water in the spa must not cause objectionable physiological effects to bathers.

[Bd. of Health, Public Spa Reg. Art. 17 §§ 17.4-17.4.4, eff. 11-27-79]—(NAC A 11-2-88)

### NAC 444.477 Inlets. (NRS 439.200, 444.070)

- 1. Spa inlets must be:
- (a) Rounded.
- (b) Smooth.
- (c) Installed at least 18 inches (46 centimeters) below the normal operating water level. An exception to this requirement may be granted by the health authority if the shallow depth of the pool or spa prevents the inlets from being installed at that depth.
  - (d) Located to produce a uniform circulation, without the existence of dead spots.
  - 2. Spa inlets must not extend from the pool wall or floor.
  - 3. Each set of stairs must have an inlet positioned to provide good circulation over the stairs.
- 4. If wall inlets are used, the spacing between adjacent inlets must not exceed 15 feet. The spacing may be varied if the number of inlets is not reduced below a number equal to one-fifteenth of the pool's perimeter in feet.
- 5. Any spa having a width greater than 30 feet (9 meters) must have floor inlets located to provide general circulation and not direct flow to floor drains. If floor inlets are used, the spacing

between adjacent inlets must not exceed 15 feet and the spacing between inlets and the adjacent wall must not exceed 10 feet (3.04 meters).

- 6. A combination of wall and floor inlets may be used if the design can be shown to produce a uniform circulation of water to maintain a uniform residual of disinfectant throughout the spa.
- 7. Spas greater than 30 feet (9.14 meters) in width must have floor inlets which comply with the spacing requirements of subsection 5 or with a combination of wall and floor inlets which comply with the spacing requirements of subsections 4 and 5.

(Added to NAC by Bd. of Health, eff. 11-2-88)

#### NAC 444.480 Drains. (NRS 439.200, 444.070)

- 1. Each spa must be provided with a drain at the deepest point to permit complete drainage. Outlets on the pump suction must be covered by suitable protective grates or antivortex covers which are securely fastened and cannot be removed except with tools.
- 2. The total velocity through grate openings must not exceed 1 1/2 feet per second (.5 meters per second) through an opening no greater than 1/2 square inch (1.3 square centimeters). Where only one main drain is provided, it must be an antivortex drain and velocity must not exceed 6 feet per second.
- 3. The location and design of spa outlets must incorporate at least one of the following methods for preventing outlet entrapment:
- (a) The spa must contain at least two outlets separated by a minimum of 3 feet, or located on different surface planes within the spa.
- (b) A hydrojet booster system that includes no fewer than two main drains separated by not less than 4 feet and connected to pipes of equal diameter. The system must not permit either drain to be cut off from the suction line. Drains for hydrojet booster systems must have antivortex covers as approved by the health authority.
- (c) The spa's drainage system must include at least one antivortex outlet drain. In depths of 4 feet 6 inches (1.37 meters) or less the antivortex drain must not provide a tripping or stubbing hazard to the bather.
- (d) The spa's drainage system must contain some other approved means to guard against outlet entrapment.
  - 4. The main drains must be capable of taking at least 50 percent of the circulated flow. [Bd. of Health, Public Spa Reg. Art. 18 §§ 18.3-18.5, eff. 11-27-79]—(NAC A 11-2-88)

### NAC 444.482 Piping. (NRS 439.200, 444.070)

- 1. Piping must be made of nontoxic material, resistant to corrosion and able to withstand operating pressures. Pipes must be identified by color code, tags or labels. All plastic piping and fittings used in the recirculation system must be designated by the NSF International as complying with all applicable requirements of NSF International Standard 14 or Standard 61 for potable water applications or in the absence of applicable requirements, be approved by the health authority. The piping must be imprinted with the manufacturer's name and the potable water mark of the NSF International, "NSF-pw," the make that indicates compliance with Standard 61, "NSF-61," or an equivalent mark.
- 2. The water velocity in spa piping other than copper piping must not exceed 10 feet per second (3.05 meters per second) for discharge piping. The velocity for copper piping must not exceed 6 feet per second (1.83 meters per second). Suction velocity for all piping must not exceed 6 feet per second (1.83 meters per second).

3. Piping around the spa which is subject to damage by freezing must be sloped for adequate drainage and supported at sufficiently close intervals so that sagging between supports will not trap water. Provisions must be made for expansion and contraction of pipes.

[Bd. of Health, Public Spa Reg. Art. 18 §§ 18.6-18.8, eff. 11-27-79]—(NAC A 11-2-88; 1-16-96)

- **NAC 444.484 Circulation and filtration.** (NRS 439.200, 444.070) Public spas must be equipped with circulation and filtration equipment which meets the following criteria:
- 1. Circulation and filtration equipment must be of sufficient capacity to recirculate the entire spa water capacity at least once every 30 minutes, and must be capable of returning the spa water to a turbidity of 1.0 NTU's at least once during the 4 hours following the use of the spa by the largest number of bathers which its size permits.
- 2. Equipment must be provided with installation and operation instructions by those who furnish the equipment.
- 3. A pressure gauge with an appropriate range must be provided in connection with each filter.
  - 4. A rate-of-flow indicator must be installed according to the manufacturer's instructions.
- 5. Materials used in the circulation system must comply with the applicable requirements of National Sanitation Foundation Standards 14 and 50 or, in the absence of any applicable or current standards, be approved by the health authority.
- 6. In climates in which freezing temperatures can be expected, the spa shell and appurtenances, piping, filter system, pump and motor, and other components must be designed and constructed to be protected from damage from freezing.
- 7. A spa which does not have a water recirculation system for purification may be used by only one person, after which the spa must be drained and the walls scrubbed and disinfected.
- 8. A vacuum gauge must be located on or just before the circulation pump on the suction side and a pressure gauge must be located immediately after the pump on the pressure side.
- 9. The recirculation system must be operated at all times the facility is open for use and for not less than 3 hours after the facility is closed. If the system is shut down for periodic maintenance and repair, no person who is not an employee of the facility may be allowed into the facility.
  - 10. If time clocks are used to govern the operation of the recirculation system, they must be:
- (a) Used to govern the operation of any equipment, such as chemical disinfectant feeders, slurry feeders or heaters, dependent upon the flow of water within the system.
  - (b) Reset immediately after any interruption in power.
  - [Bd. of Health, Public Spa Reg. Art. 19, eff. 11-27-79]—(NAC A 11-2-88)

## NAC 444.486 Pumps. (NRS 439.200, 444.070)

- 1. A pump and motor must be provided for circulation of the spa water. All pumps must provide the conditions of flow required for filtering and cleaning the filters against the total dynamic head developed by the complete system.
- 2. With all pressure filter systems, a suitable removable strainer or screen must be provided before circulation pumps to remove debris, hair, lint and other solids. Water entering the pump must first pass through the screen.
- 3. Pumps must be designed to perform the functions for which they are intended. Units must be accessible for inspection and service. Replacement parts must fit with existing parts in the

pump without the need for redrilling mounting holes or otherwise altering the replacement part of the pump.

- 4. The pump and component parts must be designed and constructed to operate safely.
- 5. Proper direction of rotation for the pump must be clearly indicated by an arrow on the pump data plate, on a separate plate attached to the pump, or cast into the pump itself.
- 6. Pumps used on spas must be designated by the NSF International as complying with all applicable requirements of NSF International Standard 50 or, in the absence of applicable requirements, be approved by the health authority.
- 7. Hydrotherapy pumps and piping systems must be independent and must not be interconnected with the filtration plumbing system.

[Bd. of Health, Public Spa Reg. Art. 22 §§ 22.1-22.5, 22.10 & 22.11, eff. 11-27-79]—(NAC A 11-2-88; 1-16-96)

## NAC 444.488 Pump motors. (NRS 439.200, 444.070)

- 1. All motors must have as a minimum an open drip-proof enclosure, as defined by National Electrical Manufacturers' Association standards, and be constructed electrically and mechanically so they will perform satisfactorily and safely under the conditions of load and environment normally encountered in spa installations.
- 2. Motors must be capable of operating pumps under full load, and must have as a minimum a 1.15 service factor. If the maximum service factor of the motor is exceeded at full voltage, the manufacturer shall indicate this on the pump curve.
- 3. All motors must have thermal overload protection and locked rotor protection, or equivalent, built in or in the line starter, to provide locked rotor and running protection.
  - 4. The motor frame must include adequate provisions for proper grounding. [Bd. of Health, Public Spa Reg. Art. 22 §§ 22.6-22.9, eff. 11-27-79]

#### NAC 444.490 Valves. (NRS 439.200, 444.070)

- 1. When a pump is installed below the overflow rim of the spa, valves must be installed on permanently connected suction and discharge lines and located in an accessible place outside the walls of the spa.
- 2. All valves must be located where they will be readily and easily accessible for maintenance and removal.
- 3. Multiport valves must be designated by the NSF International as complying with all applicable requirements of NSF International Standard 50 or, in the absence of applicable requirements, be approved by the health authority.

[Bd. of Health, Public Spa Reg. Art. 23, eff. 11-27-79]—(NAC A 11-2-88; 1-16-96)

### NAC 444.492 Overflow systems. (NRS 439.200, 444.070)

- 1. An overflow system must be provided unless the spa does not have a water recirculation system and the procedures required by subsection 7 of <u>NAC 444.484</u> are used.
- 2. The overflow system must be designed and constructed so that the water level of the spa is maintained at the operating level of the rim or weir device.

[Bd. of Health, Public Spa Reg. Art. 20 §§ 20.1 & 20.2, eff. 11-27-79]

#### NAC 444.494 Skimmers. (NRS 439.200, 444.070)

1. When surface skimmers are used as the sole overflow system, at least one surface skimmer must be provided for each 100 square feet (9.03 square meters), or fraction thereof, of

the surface area of the water. When two or more skimmers are used in a spa, they must be located to maintain effective skimming action over the entire surface area of the water.

- 2. The total capacity of all skimmers must be at least two-thirds of the required recirculation flow.
- 3. In outdoor spas, one skimmer must be placed at a point away from the direction from which prevailing winds blow, if the surface area of the water is greater than 100 square feet (9.03 square meters).
- 4. Skimmers must comply with all applicable requirements of NSF International Standard 50 or, in the absence of any current or applicable standards, be approved by the health authority.
- 5. All skimming devices must be equipped with an approved equalizer valve and equalizer line with an inside diameter of at least 2 inches (5.08 centimeters) installed at least 12 inches (30.48 centimeters) below the normal operating level of the water. The inlet to the equalizer line or lines must be designed to prevent the creation of a holding force whenever the body or limb of a bather comes into direct contact with the inlet. The inlet must be protected by a grill or shroud that will prevent a bather or any limb of a bather from entering the inlet.

[Bd. of Health, Public Spa Reg. Art. 20 §§ 20.3-20.5, eff. 11-27-79]—(NAC A 11-2-88; 1-16-96)

#### NAC 444.496 Filters. (NRS 439.200, 444.070)

- 1. Filters must be designed to maintain spa water under anticipated operating conditions in accordance with NAC 444.484.
- 2. Filters must be designed so that filtration surfaces can be easily restored to design capacity, inspected and serviced.
- 3. Separate filter, recirculation and chlorination systems must be provided for each spa and must be independent of any adjacent swimming pool or spa.
- 4. A means must be provided to permit release of air which enters the filter tank. This may be automatic, manual, or, when upflow design is used, air must be expelled through the filter tank. Any filters incorporating an automatic internal air release as the principal means of air release must have lids which provide a slow and safe release of pressure as a part of its design. Any separation tank used in conjunction with a filter tank must have, as part of its design, a manual means of air release or a lid which provides a slow and safe release of pressure as it is opened. Each separation tank must have a cautionary statement warning the user not to start up the filter pump without first opening the air release. The statement must be visible and noticeable within the area of the air release.
- 5. Piping furnished with the filter must be of suitable material capable of withstanding three times the working pressure. The suction piping must not collapse when there is a complete shutoff of flow on the suction side of the pump.
- 6. Filter components which require servicing must be accessible and available for inspection and repair when installed according to the manufacturer's instructions.
- 7. All filters must meet the applicable standards adopted by the National Sanitation Foundation.
- 8. When the filter is regenerated by backwashing, provisions must be made to dispose of the backwash water in a sanitary manner and without undue labor.

[Bd. of Health, Public Spa Reg. Art. 21, eff. 11-27-79]

- 1. Provisions must be made for disposing of material cleaned from filters and of backwash water in a manner which will not create a nuisance. The backwash water must be disposed of in accordance with applicable local law and regulation.
- 2. When drainage to a sanitary sewer or storm sewer is permitted, an air gap must be provided which will prevent any surge or backflow of contaminated water into the spa or the recirculation system.
- 3. Disposal of diatomaceous earth must be made so that no solids appear in the wastewater. This may be done by using a separation tank, stand trap, or any other method approved by the health authority.

[Bd. of Health, Public Spa Reg. Art. 26, eff. 11-27-79]

**NAC 444.500 Air induction systems.** (NRS 439.200, 444.070) An air induction system must totally prevent water backup which could cause electrical shock hazards.

[Bd. of Health, Public Spa Reg. Art. 24, eff. 11-27-79]

NAC 444.502 Disinfectant required. (NRS 439.200, 444.070) A means for disinfecting the spa water which provides a residual of disinfectant in the spa water must be employed. Chlorine or chlorine compounds are most frequently used for the purpose of disinfecting but another bactericidal agent may be accepted if it is registered with the United States Environmental Protection Agency and the Nevada State Department of Agriculture.

[Bd. of Health, Public Spa Reg. Art. 25 § 25.1, eff. 11-27-79]

- NAC 444.504 Disinfectants: Approved chemical feeders. (NRS 439.200, 444.070) The spa must be equipped with a chlorinator, hypochlorinator or other disinfectant feeder or feeders which meet the following standards:
- 1. All chemical feeding equipment and process equipment, except for feeding equipment for chlorine gas, must be designated by the NSF International as complying with all applicable requirements of NSF International Standard 50 or, in the absence of applicable requirements, be approved by the health authority.
- 2. Chemical feeding equipment must be capable of supplying at least the equivalent of 3 pounds (1.4 kilograms) of chlorine per 24 hours per 10,000 gallons (37,850 liters) of spa capacity for outdoor spas, and the equivalent of 1 pound (454 grams) of chlorine per 24 hours per 10,000 gallons (37,850 liters) of spa capacity for indoor spas.
- 3. Other disinfectant feeders may be approved if it can be demonstrated to the health authority that the required disinfectant residuals can be maintained. The material used must be subject to a simple testing procedure which will permit a ready means of determining the residual disinfectant in the water at the site of the spa.
- 4. Disinfectant feeders must be installed to ensure that the flow of the chemical disinfectant will stop immediately if there is an interruption in the flow of water to the pool or through the disinfection system.

[Bd. of Health, Public Spa Reg. Art. 25, §§ 25.2-25.2.2, eff. 11-27-79]—(NAC A 11-2-88; 1-16-96)

#### NAC 444.506 Disinfectants: Use of chlorine gas. (NRS 439.200, 444.070)

1. Where equipment for the use of chlorine gas is provided, the mechanical proportioning device, required scales and cylinders of chlorine must be housed above grade in a reasonable

gas-tight room which is mechanically vented and constructed of materials which are resistive to corrosion, and which is equipped with a door which opens outward to the outside.

- 2. Facilities in which chlorine gas is used must be provided with:
- (a) Equipment for fastening chlorine cylinders firmly in place.
- (b) Keys or valves on chlorine cylinders to permit quick shutoff in case of emergency.
- (c) A chlorine feeding device which will vent leaking chlorine gas to the outside and away from the spa during emergencies and interruptions in the water supply.
- (d) An airtight duct beginning near the floor of the room and ending at a safe point of discharge at least 8 feet (2.44 meters) above the surrounding grade outside.
- (e) A mechanical exhaust system capable of providing at least one air change per minute in the room.
- (f) An observation window at least 18 square inches (116.14 square centimeters) which provides a good view of the inside of the chlorine room.
- (g) Artificial illumination of at least 20 foot-candles which permits a person to observe and maintain equipment in the room.
- (h) Switches for the control of artificial lighting and ventilation, located outside the room and near the door.
- (i) A gas mask designed for use in a chlorine atmosphere, of a type approved by an appropriate federal agency and stored in a closed, unlocked cabinet located outside the room with a replacement canister and a record book in which mask usage can be recorded.
- (j) Personnel trained to the satisfaction of the health authority in handling chlorine and chlorination equipment.
- (k) A means to keep the temperature inside the room housing the chlorine metering equipment at a minimum temperature of 55 degrees Fahrenheit (12.8 degrees Celsius).
- (l) A sign stating "CAUTION CHLORINE GAS" placed on the outside of the door to the chlorinator room.
  - (m) A leakage test kit consisting of ammonia water and a sponge swab.
- (n) A placard posted outside the storage enclosure for cylinders of chlorine gas which has first-aid measures described on it and the telephone number of the supplier of the chlorine gas.
- (o) A chlorine gas detector with an audible alarm for each storage enclosure for cylinders of chlorine gas.

[Bd. of Health, Public Spa Reg. Art. 25 §§ 25.3-25.3.10, eff. 11-27-79]—(NAC A 11-2-88)

NAC 444.507 Disinfectants: Storage of chlorine gas. (NRS 439.200, 444.070) Cylinders of chlorine gas must not be stored:

- 1. Where they are exposed to direct sunlight;
- 2. Where they are readily accessible to the public; or
- 3. In buildings where sleeping guests are housed.

(Added to NAC by Bd. of Health, eff. 11-2-88)

NAC 444.508 Disinfectants: Test equipment. (NRS 439.200, 444.070) Each spa must be provided with an approved test kit for the determination of pH, disinfectant residuals and total alkalinity. At spas where chlorinated cyanurates are used, a test kit must be provided for cyanuric acid concentrations.

[Bd. of Health, Public Spa Reg. Art. 25 § 25.6, eff. 11-27-79]

- 1. All heating units must be separated from the spa enclosure or protected to prevent injury to bathers and other persons.
  - 2. Heater parts must be easily isolated and removed for cleaning.
  - 3. The manufacturer's recommendations for manual bypass installation must be followed.
  - 4. Temperature control must be maintained by thermostat.

[Bd. of Health, Public Spa Reg. Art. 15 §§ 15.2-15.3, eff. 11-27-79]

#### NAC 444.512 Equipment enclosure. (NRS 439.200, 444.070)

- 1. Filters, pumps, motors, chemical feeders and other accessory equipment must be enclosed in a protective enclosure.
  - 2. Floor drainage must be provided within the protective enclosure.
  - 3. Lighting and ventilation for enclosed rooms must be provided in the enclosure.

[Bd. of Health, Public Spa Reg. Art. 27, eff. 11-27-79]

#### Operation

### NAC 444.520 Operating permits. (NRS 439.200, 444.070, 444.080)

- 1. No person may operate a public spa unless he or she has applied for and received an operating permit from the health authority.
- 2. Permits expire 1 year after the date of issue unless previously revoked for a violation of the statutes and regulations of the State Board of Health or the local board of health.
- 3. A temporary permit may be issued in exceptional cases for a limited time to permit management to make changes in order to comply with the minimum requirements. Safeguards must be provided to protect the health and safety of the bathers during the time that a temporary permit is in effect.
  - 4. The permit must be posted in a conspicuous place at or near the office of each spa.
- 5. An operating permit is not transferable, and applies only to the public spa for which it is issued. When the spa is transferred or sold, the new owner must apply for and obtain a new operating permit from the health authority within 30 days of the sale or transfer.

[Bd. of Health, Public Spa Reg. Art 3 §§ 3.1, 3.1.2, 3.1.3 & 3.1.5, eff. 11-27-79]

## NAC 444.521 Fees for permits and review of plans. (NRS 439.150, 439.200, 444.070, 444.080)

- 1. The Health Division shall charge and collect \$332 for each annual permit to operate a public spa, except in areas where the laws and regulations governing public spas are administered by local health authorities.
- 2. The Health Division shall charge and collect \$370 for reviewing plans for a new public spa, except in areas where the laws and regulations governing public spas are administered by local health authorities.
- 3. The Health Division shall charge and collect \$285 for reviewing plans for a remodeled public spa which has a permit, except in areas where the laws and regulations governing public spas are administered by local health authorities.

(Added to NAC by Bd. of Health, eff. 7-20-82; A 6-23-86; 7-22-87; 8-31-89; 1-16-96; R193-03, 1-22-2004; R100-07, 10-31-2007)

NAC 444.522 Records. (NRS 439.200, 444.070)

- 1. A written record of all data pertaining to the operation and sanitation of a public spa must be maintained by the management and made available to the health authority at all times.
  - 2. This record must include:
  - (a) Amounts of various chemicals used daily;
  - (b) The approximate amount of water added each day;
  - (c) A daily check of water temperature;
  - (d) Results of chemical tests for pH and chlorine;
  - (e) Date on which the spa was emptied or the filters were cleaned;
  - (f) Flowmeter readings;
  - (g) Names of all attendants; and
  - (h) Any other information which the health authority requires.

[Bd. of Health, Public Spa Reg. Art. 5, eff. 11-27-79]

## NAC 444.524 Heater and temperature requirements. (NRS 439.200, 444.070)

- 1. Water temperature in a therapy pool must be maintained above 70°F (21.11°C), and must not be artificially heated above 104°F (40.0°C).
  - 2. Signs must be posted which state that:

EXTENDED EXPOSURE TO HOT WATER OR VAPORS MAY BE DETRIMENTAL TO THE HEALTH OF ELDERLY PERSONS AND PERSONS WITH HEART CONDITIONS, DIABETES, OR HIGH OR LOW BLOOD PRESSURE.

[Bd. of Health, Public Spa Reg. Art. 15 §§ 15.1 & 15.1.1, eff. 11-27-79]

## NAC 444.526 Safety requirements. (NRS 439.200, 444.070)

- 1. The spa must be free of protrusions, extensions, means of entanglement or other obstructions which might cause submerged entrapment of, or injury to, a bather.
- 2. Except as otherwise provided in subsection 7 of <u>NAC 444.484</u>, no person may use a spa alone. No children 12 years of age or younger who are not supervised by an adult may use a spa.
- 3. Spa covers and solar blankets may only be used when the spa is closed unless the spa cover or solar blanket is secured around the entire spa perimeter and is designed and able to support the weight of an adult person.
- 4. A sign with at least 4-inch letters on a contrasting background must be posted near the spa which indicates that children 12 years of age or younger must be supervised by an adult and that the maximum recommended time for such children to use the spa is 10 minutes.

[Bd. of Health, Public Spa Reg. Art. 28 §§ 28.1 & 28.4, eff. 11-27-79]—(NAC A 11-2-88; 1-16-96)

#### NAC 444.528 First aid. (NRS 439.200, 444.070)

- 1. Each spa or spa facility must be equipped with a standard 16-unit first-aid kit which must be kept filled and ready for use at a convenient place near the spa.
- 2. The person who is in charge of the spa must have completed a course in standard first aid which is acceptable to the health authority.

[Bd. of Health, Public Spa Reg. Art. 25 §§ 25.4 & 25.5, eff. 11-27-79]—(NAC A 11-2-88)

### NAC 444.530 Notices which must be posted. (NRS 439.200, 444.070)

- 1. Placards directing behavior of bathers must be prominently posted in locker rooms, offices, showers, toilets or elsewhere about the spa enclosure.
- 2. A sign must be posted in the immediate vicinity of the spa, stating the location of the nearest telephone with the information that emergency telephone numbers are posted on or near the telephone.
  - 3. Emergency telephone numbers must be posted on or near the telephone and must include:
- (a) The name and telephone number of the police, fire and rescue unit responsible for serving the spa.
  - (b) The name and telephone number of the nearest available physician.
  - (c) The name and telephone number of the nearest ambulance service.
  - (d) The name and telephone number of the nearest available hospital.
- (e) In lieu of the telephone numbers listed in paragraphs (a) to (d), inclusive, the number for the emergency 911 service if that emergency service is available in the geographical area of the spa.

[Bd. of Health, Public Spa Reg. Art. 3 § 3.1.4 + Art. 28 §§ 28.5-28.5.4, eff. 11-27-79]—(NAC A 1-16-96)

## NAC 444.532 Health requirements. (NRS 439.200, 444.070)

- 1. No person who has any communicable disease may be employed in any capacity at any public spa.
- 2. Any person who is or suspected by the health authority or the management to be afflicted with an infectious disease or suffering from a cough, cold, fever or sores, must be excluded from the spa area.
- 3. Any person who is suspected by the operator of being under the influence of alcohol, drugs or the like must not be permitted to enter the spa.
- 4. Since high temperature, the presence of excess oil on the skin and difficulties of maintaining a chlorine residual enhance the possibility of microbial growth and disease transmission, no person may be allowed to enter a spa which maintains less than 1.0 ppm (1.0 mg/l) of free chlorine.

[Bd. of Health, Public Spa Reg. Art. 29, eff. 11-27-79]

#### NAC 444.534 Capacity. (NRS 439.200, 444.070)

- 1. The number of persons allowed to enter a spa must be limited to a number which allows 10 square feet (0.93 square meters) of water surface area for each person using the spa.
- 2. A sign must be posted within the spa area which states the maximum number of people allowed in the spa at one time.

[Bd. of Health, Public Spa Reg. Art. 30, eff. 11-27-79]

#### NAC 444.536 Visitor and spectator areas; food and drink. (NRS 439.200, 444.070)

- 1. Spaces used by visitors and spectators must be separated from spaces used by bathers.
- 2. Food or drink must not be permitted in the immediate area of the spa or on the deck which surrounds it.

[Bd. of Health, Public Spa Reg. Art. 16, eff. 11-27-79]

#### **Violations**

**NAC 444.540 Notice of violation.** (NRS 439.200, 444.070) When the health authority inspects a public spa and finds a violation of the provisions of NAC 444.310 to 444.546, inclusive, which does not seriously endanger the public health, the health authority shall issue a written notice of the violation to the owner or his or her representative and give a reasonable time for correction.

[Bd. of Health, Public Spa Reg. Art. 4 § 4.1, eff. 11-27-79]

## NAC 444.542 Suspension or denial of operating permit. (NRS 439.200, 444.070, 444.080, 444.100)

- 1. The health authority may order a suspension of an operating permit, and order the owner or operator of a public spa to prohibit persons from using it if the health authority finds:
- (a) A failure of spa equipment, structure, area or enclosure which endangers the health or safety of the persons using or operating it.
- (b) That the spa lacks properly functioning equipment or proper material for recirculating, treating or testing the spa water.
  - (c) That the operator of the spa is not maintaining the required water quality.
  - (d) That the operator does not have a valid operating permit.
- (e) Serious or repeated violations of any of the requirements of <u>NAC 444.310</u> to <u>444.546</u>, inclusive, or interference with the health authority in the performance of his or her duties.
- 2. The health authority may deny an application for an operating permit if the applicant fails to:
- (a) Notify the health authority before construction and completion of the facility or bathing place;
- (b) Allow inspection of the public bathing or swimming facility or natural bathing place during or after its construction; or
- (c) Follow any of the requirements set forth in <u>NRS 444.065</u> to <u>444.120</u>, inclusive, and <u>NAC 444.310</u> to <u>444.546</u>, inclusive.
- [Bd. of Health, Public Spa Reg. Art. 4 §§ 4.2 & 4.2.1-4.2.5, eff. 11-27-79]—(NAC A 10-30-97)

## **NAC 444.544 Order for closure; revocation of suspended permit.** (NRS 439.200, 444.070, 444.100)

- 1. The health authority may close public spas which are not operating according to the provisions of NAC 444.310 to 444.546, inclusive.
- 2. When the health authority orders the closing of a public spa, the health authority shall issue a written order to the spa owner or operator or his or her representative stating the particular reason or reasons for the order of closure, along with the finding that the condition or conditions giving rise to the order represent a serious threat to the public health and safety.
- 3. The order must state that the spa is to be closed immediately and specify the corrective action necessary for the reinstatement of the operating permit.
- 4. The health authority shall serve the order upon the owner, operator, representative or a person in charge of the public spa. The person on whom the order is served shall close the spa immediately and shall prohibit any person from using it.
- 5. The owner, operator or representative of the person in charge of a public spa who has his or her permit suspended must comply with the requirements of the written notice of suspension

within the time stated in the notice. If the corrections ordered in the notice are not made within the time allowed, the permit to operate may be revoked.

[Bd. of Health, Public Spa Reg. Art 4 § 4.3, eff. 11-27-79]—(NAC A 11-2-88; 10-30-97)

# NAC 444.545 Procedure for review of actions taken by Health Division; appeals. (NRS 439.200, 444.070, 444.100)

- 1. A person who has reason to believe that an action taken by the Health Division pursuant to NAC 444.310 to 444.546, inclusive, is incorrect or based on inadequate knowledge may, within 10 business days after receiving notice of the action, request an informal discussion with the employee responsible for the action and the immediate supervisor of the employee.
- 2. If the informal discussion does not resolve the problem, the aggrieved person may, within 10 business days after the date scheduled for the informal discussion, submit a written request to the Bureau for an informal conference. The informal conference must be scheduled for a date, place and time mutually agreed upon by the aggrieved person and the Bureau, except that the informal conference must be held no later than 60 days after the date on which the Bureau received the written request.
- 3. Except as otherwise provided in subsection 4, the determination of the Bureau resulting from the informal conference cannot be appealed and is the final remedy available to the aggrieved person.
- 4. An applicant for or holder of a permit or license issued pursuant to NAC 444.310 to 444.546, inclusive, who is aggrieved by an action of the Health Division relating to the denial of an application for or renewal of such a permit or license or the suspension or revocation of such a permit or license may appeal that action in accordance with NAC 439.300 to 439.395, inclusive, after exhausting the informal procedures set forth in this section, except that the Bureau may waive the informal procedures, or any portion thereof, by giving written notice to the aggrieved person.
- 5. As used in this section, "Bureau" means the Bureau of Health Protection Services of the Health Division or its successor.

(Added to NAC by Bd. of Health, eff. 10-30-97)

#### NAC 444.546 Reinspection. (NRS 439.200, 444.070, 444.100)

- 1. After corrective action has been taken, the owner or operator or his or her representative shall notify the health authority that the spa is ready for reinspection.
- 2. If upon reinspection the corrective action is approved, the health authority may order the reinstatement of the operating permit, at which time the spa may be opened for use.
- 3. If upon reinspection the corrective action is not approved, the operating permit must remain suspended and the spa must be kept closed and out of use until corrections are approved.

[Bd. of Health, Public Spa Reg. Art. 4 §§ 4.4-4.6, eff. 11-27-79]