PROPOSED REGULATION OF THE STATE BOARD OF HEALTH

LCB File No. R067-10

Chapter 444 – Public Bathing Places

NAC 444 is hereby amended by adding thereto the provisions set forth as sections 1 to 248 inclusive of this regulation.

Definitions

Section 1

Definitions. As used in these regulations unless the context otherwise requires, the words and terms defined in these regulations have the meanings ascribed to them in those sections.

Sec. 2

"Abrasion hazard" defined. "Abrasion hazard" means a sharp or rough surface that would scrape the skin by chance during normal use.

Sec. 3

"Accessible" defined. "Accessible" means easily exposed for inspection and the replacement of materials and/or parts with the use of tools.

Sec. 4

"Activity pool" defined. "Activity pool" means a water recreation attraction that has waterrelated activities such as rope ladders, rope swings, cargo nets and other similar activities designed primarily for bathers other than small children.

Sec. 5

"Alkalinity" defined. "Alkalinity" means the amount of bicarbonate, carbonate or hydroxide compounds present in water solution.

Sec. 6

"Anti-vortex drain" defined. "Anti-vortex drain" means a drain having a raised cover designed to prevent or minimize any vortex effect on a person that has come into contact with the drain.

"Approved" defined. "Approved" means acceptable to the health authority based upon a determination concerning conformance with appropriate standards and good public health practices.

Sec. 8

"Artificial swimming lagoon" defined. "Artificial swimming lagoon" means an artificial body of water 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.

Sec. 9

"Attendant" defined. "Attendant" means a responsible person appointed by the owner or qualified operator whose duties include surveillance over the pool during all hours of operation.

Sec. 10

"ASME" defined. "ASME" means the American Society of Mechanical Engineers.

Sec. 11

"Backwash" defined. "Backwash" means the process of thoroughly cleansing the filter medium and/or elements and the contents of the filter vessel by the reverse flow of water through the filter.

Sec. 12

"Barrier" defined. "Barrier" means a fence, wall, building wall or a combination thereof, which completely surrounds or covers the swimming pool and obstructs access to the swimming pool or recreational water park.

Sec. 13

"Bather" defined. "Bather" means any person using a swimming pool, spa or recreational water park and deck area for the purpose of water sports, recreation therapy or related activities.

"Bather load" defined. "Bather load" means the number of persons using a pool at any one time or specified period of time.

Sec. 15

"Beach pool" defined. "Beach pool" means a sculpted pool with shallow beach-like shelves around the perimeter to create the effect of a natural beach.

Sec. 16

"Beginners' area" defined. "Beginner's area" means those water areas in pools, which are three feet, or less in water depth.

Sec. 17

"Blood-borne pathogen cleanup kit" defined. "Blood-borne pathogen cleanup kit" means a bodily fluid cleanup and disinfection kit that is maintained and completely supplied at all times and located with the first aid kit and must include: a storage and collection bucket with cover; plastic gloves, a face mask; disposable towels, disposable sponges or other absorbent material; chlorine disinfectant in a watertight package; a properly identified bio-hazard disposal bag and; instructions.

Sec. 18

"Brominator" defined. "Brominator" means a device to apply or to deliver a bromine disinfectant to water at a controlled rate.

Sec. 19

"Cartridge" defined. "Cartridge" means a pleated, or surface-type filter component with fixed dimensions that is designed to remove suspended particles from water flowing through the filter.

Sec. 20

"Chemical feeder" defined. "Chemical feeder" means a mechanical device for applying chemicals to pool.

Sec. 21

"Child amusement lagoon" defined. "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.

"Chlorinator" defined. "Chlorinator" means a device to apply or to deliver a chlorine disinfectant to water at a controlled rate.

Sec. 23

"Clarifier" defined. "Clarifier" means a coagulant or flocculent that coagulates and neutralizes suspended particles in water including inorganic salts of aluminum or iron and water-soluble organic polyelectrolyte polymers.

Sec. 24

"Cleansing shower" defined. "Cleansing shower" means the cleaning of the entire body surfaces with soap and water to remove any matter, including fecal matter, that may wash off into the pool while swimming.

Sec. 25

"Coping" defined. "Coping" means the cap on the pool or spa wall that provides a finishing edge around the pool.

Sec. 26

"Cove" defined. "Cove" means the radius between the pool or spa wall and the pool or spa floor.

Sec. 27

"Cover" defined. "Cover" means something that protects and/or shelters a swimming pool or spa when not in use.

Sec. 28

"Cross connection" defined. "Cross connection" means an unprotected connection between the piping carrying potable water and the piping or fixtures which carry other water or other substances.

Sec. 29

"Cyanuric acid" defined. "Cyanuric acid" means a chemical that helps reduce the excess loss of chlorine in water because the ultraviolet rays of the sun.

"Deck" defined. "Deck" means the 4 foot (1.21 meter) wide area around the perimeter of a public bathing or swimming facility, adjacent to the water, that is used primarily by bathers for sitting, standing or walking.

Sec. 31

"Diatomaceous earth" defined. "Diatomaceous earth" means the filtering medium of diatomite composed of microscopic fossil skeletons of the ''diatom,'' a tiny freshwater marine plankton.

Sec. 32

"Diving area" defined. "Diving area" means the area of a pool that is designed, operated, and reserved around each diving board or platform.

Sec. 33

"Deep area" defined. "Deep area" means water depths in excess of five feet (1.52 meters).

Sec. 34

"Disinfectant" defined. "Disinfectant" means energy or chemicals to kill undesirable or pathogenic (disease-causing) organisms that have a measurable residual at a level adequate to make the desired kill.

Sec. 35

"Diving board" defined. "Diving board" means a recreational mechanism for entering a swimming pool, consisting of a semi-rigid board that derives its elasticity through the use of a fulcrum mounted below the board.

Sec. 36

"Dual use swimming pools" defined. "Dual use swimming pools" means swimming pools with a slide or other feature with an average depth exceeding 24 inches (60.96 centimeters) but has no more than one water slide or other feature other than diving boards, that uses the main body of water as its landing or activity area.

Sec. 37

"DPD" defined. "DPD" means a reagent, Diethl-p-phenylene diamine (DPD) and test method that specifically measures bromine or free available and total chlorine; producing a series of colors from pale pink to dark red.

"Effective filter area" defined. "Effective filter area" means total surface area through which the designed flow rate will be maintained during filtration.

Sec. 39

"Exercise pool" defined. "Exercise pool" means a small vessel in which the swimmer swims in place, either against the push of an artificially generated water current or against the pull of restraining devices.

Sec. 40

"Falling entry pool" defined. "Falling entry pool" includes, but is not limited to slides, flumes, lily-pad walks, log rolls, cable, rope, or boom drops and any other falling entry features. These types of pools allow for the bather to drop into the pool area from a height of one to four feet (30.48 centimeters to 1.21 meters) above the water surface and in various positions of entry.

Sec. 41

"Filter" defined. "Filter" means a device that removes undissolved particles from water by recirculating the water through a porous substance (a filter medium or element).

Sec. 42

"Filter element" defined. "Filter element" means a device within a filter tank designed to entrap solids and conduct water to a manifold, collection header, pipe, or similar conduit and return it to the pool or spa and usually consists of a septum and septum support or a cartridge.

Sec. 43

"First aid kit" defined. "First aid kit" means a supplied kit used to treat injuries and must contain: First Aid pocket guide, supply checklist, assorted sterile gauze pads (4x4, 3x3, 5x9, etc.) with adhesive tape, antiseptic wipes or hydrogen peroxide, scissors, tweezers, triangular bandages, roller gauze, disposable single use gloves, eye protection, face shields, or goggles, first aid pocket masks as a barrier for rescue breathing or CPR, space blanket, and a small trash bag or bio-hazard bag.

Sec. 44

"Flume" defined. "Flume" means a device designed to provide a descending ride into a splash pool or slide run-out at the base of a water slide with friction on the bed of the flume minimized by providing a flowing film of water.

"Free available chlorine" defined. "Free available chlorine" means that portion of the total chlorine remaining in chlorinated water that has not combined with ammonia or nitrogen compounds and will react chemically with undesirable or pathogenic organisms.

Sec. 46

"Handhold or handrail" defined. "Handhold or handrail" means a device that can be gripped by a user for the purpose of resting and/or steadying him/herself and may be located inside or outside the pool or as part of a set of steps or deck-installed equipment.

Sec. 47

"Hardness" defined. "Hardness" means the amount of calcium and magnesium dissolved in water; measured by a test kit and expressed as parts per million (ppm) of equivalent calcium carbonate.

Sec. 48

"Health authority" defined. "Health authority" means officers and agents of the Health Division or of the local boards of health.

Sec. 49

"Horse play" defined. "Horse play" means any unsafe activity, which in the opinion of the health authority or the pool operator endangers the health and safety of pool users or bystanders.

Sec. 50

"Hydrotherapy spa" defined. "Hydrotherapy spa" means a unit that may have a therapeutic use but which is not drained, cleaned or refilled for each person. It may include, but not be limited to, hydrotherapy jet circulation, hot water/cold water mineral baths, air induction bubbles or any combination thereof. Industry terminology for a spa includes, but is not limited to, "therapeutic pool," "hydrotherapy pool," "whirlpool, "hot spa," etc.

Sec. 51

"Infinity pool" defined. "Infinity pool" is a swimming pool is a swimming pool which produces a visual effect of water extending to the horizon, vanishing, or extending to "infinity" and often the water appears to fall into an ocean, lake, bay, or other similar body of water and includes negative edge or vanishing edge pools.

"Influent" defined. "Influent" means the water entering a filter or other device.

Sec. 53

"Innovative design or feature" defined. "Innovative design or feature" means a design feature, equipment, device, or operative procedure not specifically covered under these regulations.

Sec. 54

"Isolation and flotation tank" defined. "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 (34.17°C).

Sec. 55

"Lifeguard" defined. "Lifeguard" means a person who supervises the safety of bathers and holds current certification in the following three areas:

- 1. Lifeguard certification in one of the following:
 - (a) American Red Cross Lifeguard Training;
 - (b) Young Men's Christian Association (YMCA) Lifeguarding;
 - (c) International Lifeguard Training Program (ILTP) for deep water;
 - (d) Starfish Aquatics Institute StarGuard; or
 - (e) Other lifeguard training approved by the health authority.
- 2. First aid certification in one of the following:
 - (a) American Red Cross First Aid;
 - (b) American Safety and Health Institute Universal Basic First Aid:
 - (c) Emergency Medical Planning America Medic First Aid (MFA); or
 - (d) Other equivalent First Aid Course approved by the health authority.
- 3. CPR certification in one of the following:
 - (a) American Red Cross CPR for the Professional Rescuer;
 - (b) American Heart Association Healthcare Provider CPR;
 - (c) American Safety and Health Institute CPR Pro for the Professional Rescuer; or
 - (d) Other equivalent CPR training approved by the health authority.

"Marking" defined. "Marking" means the placement and installation of visual marking cues to help patrons identify step, bench and swim-out outlines, slope break location, depth designations, and other warnings.

Sec. 57

"Multiport valve" defined. "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.

Sec. 58

"Natural bathing place" defined. "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.

Sec. 59

"Non-swimmer area" defined. "Non-swimmer area" means each area of a pool with water 5 feet (1.52 meters) or less in depth.

Sec. 60

"Normal operating level" defined. "Normal operating level" means the overflow point on overflow gutters or the midpoint in the throat of the skimmers.

Sec. 61

"Non-swimming area" defined. "Non-swimming area" means any portion of a pool where water depth, offset ledges or similar irregularities would prevent normal swimming activities.

Sec. 62

"Organic matter" defined. "Organic matter" means perspiration, urine, saliva, suntan oil, cosmetics, lotions, dead skin and similar debris introduced to water by users and the environment.

"Orthotolidine" defined. "Orthotolidine" also referred to as "OTO" means a colorless reagent that reacts with chlorine or bromine to produce a series of yellow-to-orange colors which indicate the amount of chlorine or bromine in water.

Sec. 64

"Overflow system" defined. "Overflow system" means a system for the removal of pool surface water through the use of overflows, surface skimmers and surface water collection systems of various design and manufacture.

Sec. 65

"Person" defined. "Person" includes governmental agencies.

Sec. 66

"pH" defined. "pH" means a value expressing the relative acidity or basicity of a substance, such as water, as indicated by the hydrogen ion concentration.

Sec. 67

"Plastic" defined. "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.

Sec. 68

"Play toy" defined. "Play toy" means a water feature added to a pool for use by bathers that provides activity or action that enhances the overall use of the water environment that includes but is not limited to fixed stationary features, inflatable or floating equipment, or other equipment with the intent to invite bathers to play on or around the feature.

Sec. 69

"Pool" defined. "Pool" means any swimming pool or any structure within a public bathing or swimming facility containing an artificial body of water.

Sec. 70

"Pool enclosure" defined. "Pool enclosure" means the area inside of the fence or barrier surrounding a public bathing or swimming facility.

"Potable water" defined. "Potable water" means any water, such as an approved domestic water supply, which is bacteriologically safe and otherwise suitable for drinking and meets the standards established by the Nevada Division of Environmental Protection as defined in NRS 445A.855.

Sec. 72

"ppm" defined. "ppm" means an abbreviation for parts per million. The unit of measurement used in chemical testing which indicates the parts by weight in relation to one million parts by weight of water. It is essentially identical to the term milligrams per liter (mg/L).

Sec. 73

"psi" defined. "psi" means an abbreviation for pounds per square inch.

Sec. 74

"Public baths defined" "Public baths" mean a facility 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 these regulations and include mineral baths, therapeutic pools and similar facilities.

Sec. 75

"Public bathing or swimming facility" defined.

- 1. "Public bathing or swimming facility" means any: Artificial swimming lagoon, beach pool, child amusement lagoon, isolation, or flotation tank, infinity pool, mineral bath, therapeutic pool or similar facility, reverse flow pool, river ride, special purpose pool, swimming pool, wading pool, or any water recreation attraction such as spray pads or fountains 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.

Sec. 76

"Qualified professional" defined. "Qualified professional" means a person who is professional engineer 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 sub-classification issued by the State Contractors' Board.

"Recirculation equipment" defined. "Recirculation equipment" means the mechanical components that are part of a recirculation system in a pool or spa. Recirculation equipment may be, but is not limited to categories of pumps, hair and lint strainers, filters, valves, gauges, meters, heaters, surface skimmers, inlet/outlet fittings and chemical feeding devices. The components have separate functions, but when connected to each other by piping, perform as a coordinated system for purposes of maintaining pool or spa water in a clear, sanitary and desirable condition.

Sec. 78

"Recirculation system" defined. "Recirculation System" means an arrangement of mechanical equipment or components, connected by piping to a pool or spa in a closed circuit. The function of a recirculation system is to direct water from the pool or spa, causing it to flow through the various system components for purposes of clarifying, heating, purifying and returning the water back to the original body of water.

Sec. 79

"Remodel" defined.

- 1. "Remodel" means to replace all or part of any structure, recirculation 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.

Sec. 80

"Ramp" defined. "Ramp" means a sloping floor, walk or roadway leading from one level to another, or leading to the pool edge and having a maximum slope of 1:12.

Sec. 81

"Rate of flow" defined. "Rate of flow" means the quantity of water flowing past a designated point within a specified time, such as the number of gallons flowing in one minute (gpm).

"Recessed step" defined. "Recessed step" 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 pool wall, creating a stair well.

Sec. 83

"Removable" defined. "Removable" means capable of being disassembled with the use of only simple tools such as a screwdriver, pliers or wrench.

Sec. 84

"Ring buoy" defined. "Ring buoy" means a ring-shaped floating buoy capable of supporting a user.

Sec. 85

"River ride" defined. "River ride" means a water recreation attraction designed to convey bathers around a relatively flat course using an artificially created current.

Sec. 86

"Rope and line float" defined. "Rope and line float" means a length of rope with flotation devices attached.

Sec. 87

"Service animal" defined. "Service animal" means an animal that is trained for the purposes of assisting or accommodating a disabled person's sensory, mental, or physical disability.

Sec. 88

"Shallow area" defined. "Shallow area" means portions of a pool with water depths five feet (1.52 meters) or less.

Sec. 89

"Shock treatment" defined. "Shock treatment" means the practice of adding significant amounts of an oxidizing chemical to water to destroy ammonia, nitrogenous and organic contaminants in water.

"Skimmer weir" defined. "Skimmer weir" means the part of a skimmer which adjusts automatically to small changes in water level to assure a continuous flow of water to the skimmer.

Sec. 91

"Slide run-out" defined. "Slide run-out" means a shallow flume at the end of a water slide in which the bather ends his slide.

Sec. 92

"Slip resistant" defined. "Slip resistant" means a finish or textured surface without any abrasion hazards and designed to prevent or reduce slipping by bare skin in contact with it under wet conditions. The surface must not be an abrasion hazard.

Sec. 93

"Special purpose pool" defined. "Special purpose pool" means any pool operated for recreational play and other special purposes, including, but not limited to supervised instruction, training, therapy, treatment or competition and include but are not limited to wave or surf-action pools, activity pools/interactive pools, exercise pools, wading pools, lap pools, hydrotherapy pools, swimming instruction pools, isolation tanks and play areas. It may also include: artificial swimming lagoons, pools used for scuba training, kayaking, portable rental spas, sensory deprivation tanks, public promotions at sports fields, county fairs, and any special events using portable pools.

Sec. 94

"Spectator and visitor area" defined. "Spectator and visitor area" means an area approved by the health authority where people may socialize, eat and drink and which does not include the pool deck.

Sec. 95

"Splash pad or fountain" defined. "Splash pad or fountain" means an easily accessible area for water play that has no standing water where water may be forced from nozzles, misters and similar devices into the air so people can interact with the water.

Sec. 96

"Splash pool" defined. "Splash pool" means the area of water located at the end of a water slide or vehicle slide.

"Spray pool" defined. "Spray pool" means a shallow man-made structure or area constructed from materials other than natural earth or soil used for spraying humans with water in which water is supplied by a system of sprays and where that water is allowed to accumulate and is recirculated as required.

Sec. 98

"Stairs" defined. "Stairs" means a riser and tread or a series of risers and treads extending down from the deck into the pool.

Sec. 99

"Stationary diving platform" defined. "Stationary diving platform" means a stationary diving platform used for diving and are constructed or located on site. They may be natural or artificial rocks, pedestals or other items.

Sec. 100

"Steps" defined. "Steps" means stairs or ladders designed to permit entry and exit to and from the pool.

Sec. 101

"Suction line" defined. "Suction line" means that piping through which water is removed from the pool.

Sec. 102

"Suction outlet" defined. "Suction outlet" means the opening or fitting through which the water under negative pressure is drawn from the pool or spa.

Sec. 103

"Surface skimming system" defined. "Surface skimming system" means perimeter-type overflows, surface skimmers and surface water collection systems of various design and manufacture which permit the continuous removal of floating debris and surface water to the filter.

Sec. 104

"Surge tank" defined. "Surge tank" means a tank receiving the gravity flow from an overflow gutter and main drain or drains from which the recirculation pump takes water which is returned to the system.

"Swimming pool" defined. "Swimming pool" means any structure containing an artificial body of water that is intended to be used collectively by single person or more for swimming or bathing, regardless of whether a fee is charged for its use. The term does not include 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 any other kind of public bathing or swimming facility.

Sec. 106

"Test kit" defined. "Test kit" means a device used to monitor specific chemical or agent residuals or demands in pool or spa water.

Sec. 107

"Time clock" defined. "Time clock" means a device that automatically controls the periods that a pump, filter, chlorinator, heater, blower and other electrical devices are running.

Sec. 108

"Total alkalinity" defined. "Total alkalinity" means the ability or capacity of water to resist change in pH; also known as the buffering capacity of water.

Sec. 109

"Total available chlorine" defined. "Total available chlorine" means the sum of both the free available and combined chlorines.

Sec. 110

"Toxic" defined. "Toxic" means a quantity which might produce an adverse physiological effect on a person.

Sec. 111

"Turbidity" defined. "Turbidity" means the cloudy condition of water because of the presence of extremely fine particulate materials in suspension that interfere with the passage of light.

Sec. 112

"Turnover Rate" defined. "Turnover Rate" means the circulation rate required to circulate the volume of water of the pool in a turn over cycle.

"Vacuum" defined. "Vacuum" means the reduction of atmospheric pressure within a pipe, tank, pump or other vessel. Vacuum is measured in inches of mercury. One inch (1") of mercury is equivalent to one and thirteen hundred feet of head. The practical maximum vacuum is thirty inches (30") of mercury or thirty three and nine tenths feet of head.

Sec. 114

"Vehicle slide" defined. "Water Slide means a recreational pool where bathers ride vehicles, toboggans, sleds, etc., down a slide to descend into a splash pool.

Sec. 115

"Virginia Graeme Baker Pool and Spa Safety Act" defined. "Virginia Graeme Baker Pool and Spa Safety Act" means a 2008 act of Congress specifically "Public Laws 110–140" which define certain drain requirements pertaining to pool and spa safety.

Sec. 116

"Wading pool" defined. "Wading pool" means a small and shallow pool not exceeding 24 inches (60.96 centimeters), void of any water activity features to be used mainly by non-swimming children, and those supervising the children.

Sec. 117

"Waterline" defined. "Waterline" means where a skimmer system is in use, the midpoint of the operating range of the skimmer or the height of the overflow rim when an overflow system is used.

Sec. 118

"Water recreation attraction" defined. "Water recreation attraction" means any activity pool, child amusement lagoon, splash pad pool or fountain, spray pad or fountain, water slide, watercourse ride, wave pool or zero depth entry pool. 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.

Sec. 119

"Water slide" defined. "Water slide" means a water recreation attraction having one or more flumes. A water recreation attraction ride which is characterized by having trough-like or tubular flumes or chutes.

"Watercourse ride" defined. "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.

Sec. 121

"Wave pool" defined. "Wave pool" means a water recreation attraction characterized by the artificial generation of waves at one end of a pool and ending at the other end with a zero-depth-entry.

Sec. 122

"Zero depth entry pool" defined. "Zero depth entry pool" means a pool where the pool floor continues to slope upward to a point where it meets the surface of the water and the pool deck. This may be any type of pool that in place of a wall at one end, may have a sloping edge or heach.

Sec. 123

Applicability.

- 1. The provisions of these regulations referring to construction or modifications apply to all public pools constructed on or after July 1, 2010 and to any other public pools, 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 these regulations pertaining to maintenance and sanitation apply to all public pools.

Sec. 124

Severability. If any provision of these regulations is declared unconstitutional or invalid for any reason, the remainder of the provisions of those sections is not intended to be affected thereby.

Plans

Sec. 125

Application; plans and specifications.

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 qualified professional. A licensed

professional engineer or a registered architect shall include his seal and signature on any plans and specifications submitted to the health authority. A licensed contractor shall include his 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.
- (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 of the plans must be submitted if requested by the health authority.
 - 4. The submitted plans must be approved in writing before any construction is undertaken.
- 5. The public bathing or swimming facility must be designed so that bather safety and health are not compromised after the facility is in operation.

Sec. 126

Changes in plans; structural adequacy.

- 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 Nevada State Board of Registered Professional Engineers and Land Surveyors.

Sec. 127

Inspections.

1. The owner or his 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 agent may be required to hire a third party inspector. The third party inspector may be selected by the owner or his agent upon the approval of the health authority.
- 3. The facility may not be placed in operation until the inspection shows compliance with the requirements of these regulations.

Construction Standards

General

Sec. 128

Use of equipment and materials not designated by NSF International. 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 these regulations, if the health authority determines that the equipment and materials comply with standards equivalent to the NSF International Standards.

Sec. 129

Alternate equipment, materials, and methods of construction.

- 1. The health authority may approve an alternative equipment material or method of construction, provided it finds that the proposed design is satisfactory and complies with the provisions these regulations, that the equipment, material, method or work offered is, for the purpose intended, at least equivalent to that prescribed in suitability, strength, effectiveness, fire resistance, durability, safety, and sanitation, or that the methods of installation proposed conform to other acceptable nationally recognized standards, and providing the alternate has been approved and its use authorized by the health authority.
- 2. The health authority will require that sufficient evidence or proof be submitted to substantiate any claims that may be made regarding the use of alternate equipment, materials or methods of construction.
- 3. Whenever there is insufficient evidence of compliance with the provisions of these regulations, the health authority may require tests as proof of compliance to be made at no expense to the health authority.
- 4. Tests must be made in accordance with approved standards, but in the absence of such standards, the health authority will specify the test procedure.

Sec. 130

Location. A pool must be located where it will not be exposed to undesirable substances or surface drainage from surrounding areas.

Shape.

- 1. The shape of any pool must be such that the recirculation 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.

Sec. 132

Side walls and bottoms.

- 1. The side walls and bottoms of all pools must be constructed of materials which are inert, nontoxic to man, 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 abrasion hazards, and have a slip-resistant finish which is smooth and easily cleanable. Floors and walls below the gutter and 6-inch (15.24 centimeters) 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 coved.
- 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 because of freezing.

Sec. 133

Use of manufactured products to resist slipping. 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.

Acoustics. 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.

Sec. 135

Slope.

- 1. Except as otherwise provided in these regulations 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 these regulations, the depth at the slope break must be 5 feet (1.5 meters). An exception may be made permitting the break-point to occur at a minimum of 4 feet 6 inches (1.37 meters) for pools less than 60 feet (18.28 meters).

Sec. 136

Equipment rooms.

- 1. Pumps, chlorinators, filters and other electrical equipment must be installed in a protective enclosure such as a room or building and be locked, permitting access only to authorized personnel.
- 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 (0.91 x 1.82 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 only store chemicals and auxiliary equipment necessary for the operation and maintenance of the facility.
 - 4. Equipment rooms constructed after July 1, 2010 must have a floor drain.
 - 5. All equipment rooms must be lighted to properly operate and maintain the equipment.

Innovative Designs

Sec. 137

Beach pools.

- 1. An innovative swimming pool design such as a beach pool must not endanger the health or safety of bathers or contribute contamination of any kind to the water in the pool.
- 2. Beach pools must the requirements of these regulations as determined by the health authority.
- 3. Beach pools and such facilities must be designed by an architect or a qualified professional engineer who is licensed by the Nevada State Board of Registered Professional Engineers and Land Surveyors.

Benches, ledges, waterfalls, rockeries and plantings.

- 1. Owners providing innovative designs or special features shall ensure the features meet the requirements of this section.
- 2. Benches. A single bench or seat that is recessed from the general wall of the swimming pool may be built into the shallow area of the pool, if it meets the following conditions:
 - (a) May not be located in an area that is used for lap swimming;
- (b) May not exceed twenty percent of the length of the side it is located on or five percent of the perimeter of a free form pool;
- (c) Must have a minimum two-inch or wider durable continuous line of a contrasting color on the top and side of the bench edge, so as to be readily visible to persons standing on the deck and persons swimming in the water; and
- (d) The area of the deck above the bench must be labeled in nonslip lettering at least four inches high in contrasting color with the background: "NO DIVING."
 - 3. Ledges. In swimming pools, a single ledge may be built into the deep end of the pool, if:
 - (a) The ledge construction conforms with the requirements of these rules and
 - (b) The ledge is in a contrasting color from the rest of the pool for easy visibility.
- 4. Waterfalls. A waterfall feature may be built at swimming pool facilities if the following conditions are met:
 - (a) Waterfalls must be designed and maintained to maintain bather safety.
- (b) Minimum walkway areas required in other sections of this chapter must be maintained around pools;
- (c) Water in waterfalls that commingles with pool water must meet water quality and treatment requirements specified in other sections of this chapter and any additional disinfection required by the health authority to address anticipated increased demands and aerosolization of disinfectant;
- (d) Flows may not create turbulence that might create a safety hazard or reduce visibility in the pool; and
- (e) Waterfalls that flow from pool sidewalls may not exceed five percent of the total pool perimeter.
- 5. Rockeries. A decorative rock feature may be built at a pool, if the following conditions are met:
- (a) The design will not adversely impact bather safety and proper operation of the pool and is acceptable to the health authority;

- (b) The design has a nonslip surface without sharp or cutting edges in any areas that provide a potential foothold, stepping or standing access; and
 - (d) Water from the feature must away from the pool.

Bridges and walkways.

- 1. An innovative swimming pool design such as 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. Bridges and walkways must meet the requirements of these regulations as determined by the health authority.
- 3. The bridges and walkways must be designed by an architect or a qualified professional engineer who is licensed by the Nevada State Board of Registered Professional Engineers and Land Surveyors.
 - 4. Any such bridge or walkway must:
- (a) Be not less than 8 feet (2.44 meters) above the bottom of the pool and not less than 4 feet (1.22 meters) above the surface of the water in the pool;
- (b) Have a slip-resistant surface without abrasion hazards 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.

Bather Safety

Sec. 140

Depth markings.

- 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 (7.62 meters) intervals.
- 2. Depth markers must be in numerals not less than 4 inches (10.16 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.

Sec. 141

Chairs for lifeguards.

- 1. Each pool may have a single elevated lifeguard chair. When provided this is 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 (12.19 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.

Lifelines, rope and line floats.

- 1. Devices for fastening lifelines, rope and line floats must be installed at least 2 feet (0.60 meter) toward the shallow end from the break in grade between the shallow portion and the deep portion of a pool with its position marked with visible floats at not greater than seven foot (2.13 meter) intervals. These devices must be securely anchored, of corrosion resistant material and of a type which will be recessed or have no hazardous projection.
- 2. Line must be of sufficient size and strength to offer a good handhold and support loads normally imposed by users.
 - 3. A lifeline with floats must be installed if required by the health authority.

Diving

Sec. 143

Limitations on depth; signs prohibiting diving.

- 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 (0.91 meter) or more than 3 feet 6 inches (1.06 meters) from the normal operating level to the floor except for racing pools which must have a minimum depth of three feet six inches (1.06 meters). 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 (1.06 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 (15.24 centimeters).

- 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.
- 5. The beginners' area of a pool must be visually set apart from, but may be adjoined to, the shallow area and must not adjoin the deep area.
- 6. The transition point or point of slope change of the pool from the beginners' area to the shallow area and from the shallow area to the deep area and at the points of separation of diving, slide and amusement areas must be visually set apart with a rope and line floats, depth markers and a four inch (10.16 centimeters) minimum width row of floor tile, painted line or similar means of a color contrasting with the bottom.
- 7. In diving pools with a constant slope, the shallow area must be visually set apart from the deep area with a rope and line floats, depth markers and a four inch (10.16 centimeter) minimum width row of floor tile, painted line or similar means of a color contrasting with the bottom.
- 8. The health authority may waive the need for a rope and line floats in swim-out areas or similar construction where deemed necessary.

Diving area and equipment.

- 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 and in which diving is allowed must contain an adequate area and a depth of water to provide safe diving. A qualified professional must certify to the health authority in writing that the diving area is properly designed for diving.
- 3. Diving boards, stationary diving platforms, towers and such other platforms in excess of 9 feet (2.74 meters) in height are not allowed 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, stationary diving platforms 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 (4.87 meters) of unobstructed clearance must be provided above diving boards and 10 feet (3.04 meters) for diving 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 3 feet, (.91 meter) above the water, except those ladders set at 15° or less from the vertical. Platforms and diving boards which are over 3 feet (.91 meter) high must be protected with guard railings.

Diving Areas.

Where diving is permitted, the diving area design, equipment placement, and clearances must meet the design specifications submitted to the health authority by a qualified professional.

- 1. The use of a starting platform is restricted to competitive swimming events or supervised training for competitive swimming events.
- 2. When starting platforms are used for competitive swimming or training, the water depth must be at least four feet.
- 3. The operator shall either remove the starting platforms or secure them with a lockable cone-type platform safety cover when not in competitive use.
- 4. Areas of a pool where diving is not permitted must have "NO DIVING" or the international no diving icon, or both provided in block letters at least four inches (10.16 centimeters) in height in a contrasting color on the deck, located on the horizontal surface of the deck or coping as close to the water's edge as practical.
- 5. Where the "NO DIVING" warnings are used, the spacing between each warning may be no greater than 25 feet (7.62 meters).
- 6. Where the icon alone is used on the deck as required, the operator shall also post at least one "NO DIVING" sign in plain view within the enclosure. Letters must be at least four inches in height with a stroke width of at least one-half inch with a color contrasting with the background.
- 7. Platforms and diving boards which are over 3 feet, (.91 meter) must be designed to protect divers from falls to the deck or pool curb by the installation of guard railings.

Pool Entrance and Exit Standards

Sec. 146

Ladders and stairs.

- 1. Stairs, steps 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 (0.60 meter).
- 2. Stairs or steps leading into the pool must be of slip-resistant design, have a minimum tread of 12 inches (30.4 centimeters), and a maximum rise of 10 inches (25.40 centimeters).

Steps must have a line at least 1 inch (2.54 centimeters), in width, and be of a contrasting dark color for maximum visual distinction within 2 inches (5.08 centimeters) of the leading edge of each step and have a minimum width of 18 inches (45.72 centimeters), as measured at the leading edge of the step.

- 3. In areas of a pool where the water depth is greater than 2 feet (.60 centimeters), and less than 5 feet (1.52 meters), as measured vertically from the bottom of the pool to the mean operating level of the pool water, steps or ladders must be provided, and be located in the area of shallowest depth.
- 4. In areas of the pool where the water depth is greater than 5 feet (1.52 meters), as measured vertically from the bottom of the pool to the mean operating level of the pool water, ladders or recessed steps must be provided.
- 5. A pool over 30 feet (9.14 meters), wide and 75 feet (22.86 meters), or greater in length, must have ladders or recessed steps at each side of the deep portion of the pool.
- 6. A minimum of one ladder must be provided for each 75 feet (22.86 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.
- 7. If step-holes are provided, they must be of a design that they may be readily cleaned and must drain into the pool to prevent accumulation of dirt. Step-holes must have a minimum tread of 5 inches (12.7 centimeters) and a minimum width of 14 inches (35.56 centimeters).
- 8. 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 step-holes There must be a clearance of not more than 5 inches (12.7 centimeters) or less than 3 inches (7.62 centimeters) between the ladder and the pool wall.
- 9. All stairs entering a pool that are recessed into the walls of the pool must have guardrail must be provided in the walkway around the stairwell. An approved handrail must be provided for each set of stairs.
- 10. Ladders or recessed steps must be located within 15 feet (4.57 meters), of the diving area end wall.
 - 12. The steps, recessed steps, and ladders, must have one or more handrails.
- (a) Handrails must be rigidly installed and constructed in such a way that they can only be removed with tools.
 - (b) Handrails must be constructed of corrosion resistant materials.
 - (c) The outside diameter of handrails may not exceed 2 inches (5.08 centimeters).
- (d) Submerged steps or rungs which are not recessed must be guarded by handrails. The hand rail must be mounted on the deck and extend to the bottom step.
 - 13. Pool ladders must meet the following requirements:
 - (a) Pool ladders must be corrosion-resistant and must be equipped with non-slip rungs.
 - (b) All ladders must be designed to provide a handhold and must be rigidly installed.

- (c) There must be a clearance of not more than 5 inches (12.70 centimeters), nor less than 3 inches (7.62 centimeters), between any ladder rung and the pool wall.
 - 14. Full or partial recessed steps must meet the following requirements:
- (a) Where full or partial recessed steps are used, a set of handrails must be located at the top of the course with a rail on each side. The handrails must extend over the coping or edge of the deck.
- (b) Full or partial recessed steps must be designed to be readily cleanable and to provide drainage into the pool to prevent the accumulation of dirt on the step.
- (c) Full or partial recessed steps must have a minimum run of 5 inches (12.70 centimeters), and a minimum width of 14 inches (35.56 centimeters).
- 15. The designing architect or engineer or the facility owner must anticipate maximum loads on supports, platforms and steps for diving boards, and ensure that supports, platforms, and steps are of substantial construction and of sufficient structural strength to safely carry the maximum anticipated loads.
- 16. Handrails must be provided at all steps and ladders leading to diving boards more than 3 feet (.91 meter), above the water.

Handholds.

- 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).

Sec. 148

Ballet rails.

- 1. Owners may install ballet-type rails on pools having uses limited to exercise and training but may install ballet-type rail on all other pools if:
- (a) The rail is inset into the wall to preclude any obstructions in the pool; and
- (b) The rail is removable and covers are provided and used to maintain a flush surface when not in use.

Decking

Sec. 149

Decks.

- 1. Except as otherwise provided in this subsection and in these regulations 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 (1.22 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 (1.22 meters) 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. Deck drainage is required and must meet the following requirements:
 - (a) The surface of the paved deck must not drain into the pool or the overflow gutter;
- (b) Drainage must be conducted from the deck in a manner that will not create muddy, hazardous or objectionable conditions;
- (c) Decks must slope on a minimum slope of 1/4 inch (0.64 centimeter) per foot (30.48 centimeters) or 2 percent to the drains to points at which the water will have a free, unobstructed flow to points of disposal at all times;
- (e) If deck drains are provided, they must be spaced or arranged so that not more than 400 square feet (37.16 square meters) of area is tributary to each drain and drains must not be more than 25 feet (7.62 meters) apart and
 - (f) 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 or injury 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.
- 6. Decks and walkways must be maintained free of standing water and must have non-slip surfaces free of abrasion hazards.
 - 7. Wooden decks, walks or steps must be sealed and free of rot or water damage.
 - 8. Steps serving decks must meet the following requirements:
- (a) Risers of steps for the deck must be uniform and have a minimum height of 3-3/4 inches, (9.53 centimeters), and a maximum height of 7-3/4 inches, (19.69 centimeters);

- (b) The minimum run of steps must be 10 inches (25.4 centimeters) and
- (c) Steps must have a minimum width of 18 inches (45.72 centimeters).
- 9. The deck of a wading pool may be included as part of adjacent pool decks.
- 10. Wood decking, carpeting or artificial turf deck surfaces are prohibited within 4' (1.22 meters) of pools or within the limits of the deck drainage. Pools previously approved with deck surfaces not complying with these requirements must comply at such time when the surface requires repair or is replaced.
- 11. Joints between concrete deck slabs must be watertight and must be designed so as to protect the pool, coping and its mortar bed from movement of the deck.
 - 12. Decks must be provided with expansion joints where needed.
- 13. Voids between adjoining concrete deck slabs must be no greater than 3/16" (5 millimeters).
 - 14. Adjoining deck surface elevations must vary no more than 1/4" (6 millimeters).

Barriers

Sec. 150

Barriers; exclusion of unauthorized persons.

- 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 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.
- 3. A plainly marked emergency fire exit must be provided in the fence or structure enclosing the pool area. A suitable and clearly marked fire extinguisher must be maintained in the checking stand or other easily accessible location.
- 5. The barrier must be impenetrable for small children and must not offer any external handholds or footholds.
- 6. Barriers must be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.
- 7. 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 (1.52 meters) in height.
- 8. 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 (1.83 meters) in height.
- 9. Any vertical members in the barrier must not be more than 4 inches (10.16 centimeters) apart.

- 10. Any opening at the bottom of the barrier must not be more than 4 inches (10.16 centimeters) in height.
 - 11. 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 (1.06 meters) above the ground.
- (b) Entrances with self-closing and self-locking devices requiring the use of a key, key card, or combination code to gain access may have controls 36" to 54" (0.91 meter to 1.35 meters) above the exterior ground surface. The gates or doors cannot require a key, key-card or combination to exit the pool area.
 - (c) Must self-close and positively self-latch from any open position.
 - (d) Must not be blocked open or otherwise disabled to prevent closing and latching.
 - (e) Must, in the case of an indoor pool, be made of metal and installed in a metal frame.
- 12. The operator of the pool shall periodically inspect each gate or door of the facility to ensure that it is operating properly.
- 13. 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.
- 14. 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.
- 15. When a chain link mesh is use, the maximum mesh size must be one and one-fourth inches (3.18 centimeters) square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to no more than one and one fourth inches (3.18 centimeters)
- 16. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members must be no more than one and one-fourth inches (3.18 centimeters).
- 17. When a pool is closed to patrons, all entry/exit points must be properly maintained and secured against unauthorized entry.
- 18. Construction methods and materials must be used that provide a durable and low maintenance structure. The health authority may approve alternate enclosure materials and methods where it finds such materials and methods equivalent to those described.
- 19. For outdoor pools, a security-type pool cover may only be added as an additional layer of security for the pool, especially during the off season for those pools which maintain water in the pool basin.

Plumbing, Water Quality and Wastewater Disposal Sec. 151

Hose bibs. At least one hose bib must be provided within 50 feet (15.24 meters) of the pool and in additional 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.

Sec. 152

Disposal of wastewater.

- 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. The backwash water must be disposed of in accordance with applicable local law and regulation.
- 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 back-flow 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.

Sec. 153

Connections for supply and disposal of water.

- 1. No direct mechanical connection (cross 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 back-flow in a manner approved by the health authority. All pools must be equipped with acceptable provisions, such as over fall fill-spouts, surge tanks or receptors, for adding makeup water.
- 2. Water used to fill any pool must be supplied by an overfall fill-spout providing an air-gap of not less than 6 inches (15.24 centimeters) between the flood level at the pool and the lowest point of the fill-spout, 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 or similar facilities must discharge into a sewage system approved by the health authority.

Sec. 154

Water quality.

1. Water entering a public bathing or swimming facility for the first time must be potable and meet the bacteriological standards 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 (3,785.41 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 these regulations.
 - 3. The equipment must provide water which meets the following standards:
- (a) The water must be continuously disinfected by a chemical or method which imparts an easily measured, freely available residual effect. Except as otherwise provided, 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.
- 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.

Water sampling.

- 1. Facilities maintaining approved operating records and having dependable disinfection and filtration are not required to submit bacteriological samples for testing.
 - 2. If sampling is required, 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).

Water Recirculation

System for recirculation.

- 1. Except as otherwise provided in these regulations 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 and
 - (c) At least one complete water turnover is required before the next period of operation.
- 6. Equipment must be provided with installation and operation instructions by those who furnish the equipment.

Sec. 157

Recirculation Pump Capacity. Pool recirculation pumps must have the following total dynamic head capacities for the filter specified:

- 1. Pressure diatomaceous earth filters At least 60 feet (18,288 mm).
- 2. Vacuum diatomaceous earth filters Twenty inches (508 mm) vacuum on the suction side and 40 feet (12,192 mm) of total dynamic head.
 - 3. Rapid sand filters At least 45 feet (13,716 mm).
 - 4. High rate sand filters At least 60 feet (18,288 mm).
 - 5. Cartridge filters At least 60 feet (18,288 mm).

Pumps with other total dynamic head capacities may be allowed if they comply with the flow capacities in these regulations and the required turnover times are attained.

Sec. 158

Turnover rates by pool type. The turnover rates by pool type are:

- 1. Dual use swimming pools, 4 hours.
- 2. River rides, 4 hours.

- 3. Slide plunge pools, flumes and all other plunge/falling entry pools, 60 minutes.
- 4. Wading pools (without any interactive equipment), 30 minutes.
- 5. Wading/Interactive Play Pools/Child amusement lagoons (maximum depth, 24 inches, 20.96 centimeters), 60 minutes.
 - 6. Water attractions/Equipment pump reservoir tanks, 30 minutes.
 - 7. Wave pools, 3 hours.
 - 8. Zero depth pools/Spray pads/Spray pools, 30 minutes unless discharged to waste.

Rate of flow. 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 recirculation or during the filter back-washing operation can be determined.

Sec. 160

Inlets.

- 1. Except as otherwise provided in this subsection, inlets must be rounded and smooth and installed not less than 18 inches (45.72 centimeters) below the normal operating level and located to produce a uniform recirculation, 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 (4.57 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 (4.57 meters).
 - (2) Floor units and the nearest wall must not exceed 10 feet (3.05 meters).
- 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 recirculation.

- 7. There must be at least one inlet per 400 square feet (37.16 square meters) of pool area or 10,000 gallons of water, whichever is greater.
- 8. Pools more than 50 feet (15.24 meters) wide and reverse flow pools must use floor inlet fittings uniformly spaced no more than 20 feet (6.09 meters) apart and within 15 feet (4.57 meters) of the sidewalls.
 - 9. Grates must be designed so as to prevent entrapment of fingers.
- 10. All recirculation inlet fittings must be adjustable for rate of flow. Wall inlet fittings must be directional.
- 11. Inlet fittings must have tamper-proof screws that cannot be removed except with tools. Grates, anti-vortex plates and inlet fittings must be in place whenever the pool is in use.
 - 12. Direct potable water pool inlets must:
- (a) Be over-the-rim fill spouts with air gaps located under a diving board or beside grab rails; or
- (b) Be through-the-wall fill lines located above the water level and equipped with an appropriate back-flow prevention device installed; or
- (c) Be directly connected to the recirculation water supply and equipped with reduced pressure device installed on the potable water supply adjacent to the connection with the pool recirculation water.

Drains.

- 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 (6.09 meters) on the centers.
 - (b) Any side wall must not exceed 15 feet (4.57 meters).
- 3. The sump of each main drain must be covered with a suitable protective cover or grate securely fastened in 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 (0.457 meters) per second. If only one main drain in the pool is connected to a pump:
- (a) The drain must be of anti-vortex design and meet the requirements of the "Virginia Graeme Baker Pool and Spa Safety Act".
 - (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 anti-vortex 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 and comply with the requirement of the "Virginia Graeme Baker Pool and Spa Safety Act".
- 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 NSF International.
 - (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.

Drains: "Virginia Graeme Baker Pool and Spa Safety Act" compliance.

- 1. Each pool must have a minimum of two outlets. All pool outlets must meet the following design criteria:
- (a) The grates or covers of all submerged outlets in pools must conform to the standards of ANSI/ASME A112.19.8a-2008.
- (b) The outlets must be constructed so that if one of the outlets is completely obstructed, the remaining outlets and related piping will be capable of handling 100 percent of the maximum design recirculation flow.
 - (c) All pool outlets must connect to pipes of equal diameter.
- (d) The outlet system must not allow any outlet to be cut out of the suction line by a valve or other means.
- (e) At least one of the recirculation outlets must be located at the deepest point of the pool and must be piped to permit the pool to be completely and easily emptied.
- (f) The center of the outlet covers or grates of multiple main drain outlets must not be spaced more than 30 feet (9.14 meters) apart nor spaced closer than 3 feet (0.914 meters) apart.
- (g) Multiple pumps may use the same outlets only if the outlets are sized to accommodate 100 percent of the total combined design flow from all pumps and only if the flow characteristics of the system meet the requirements of this section.
- (h) No feature or recirculation pump must be connected to less than two outlets unless connected to an anti-entrapment outlet system that the operator demonstrates to the health authority as being effective in preventing entrapment.

- (i) There must be one main drain outlet for each 30 feet (9.14 meters) of pool width. The centers of the outlet covers or grates of any outermost main drain outlets must be located within 15 feet (4.57 meters) of a side wall.
- (j) Devices or methods used for draining pools must prevent overcharging the sanitary sewer.
- (k) No operator shall allow the use of a pool with outlet grates or covers that are broken, damaged, missing, or not securely fastened.
- 2. Notwithstanding Section 3, all public pools must comply with the remaining sections of these regulations. The pool operator shall not install, allow the installation of, or operate a pool with a drain, drain cover, or drain grate in a position or an application that conflicts with any of the following mandatory markings on the drain cover or grate under the standard required in in this section:
 - (a) Whether the drain is for single or multiple drain use;
 - (b) The maximum flow through the drain cover; and
 - (c) Whether the drain may be installed on a wall or a floor
- 3. The pool operator shall not install, allow the installation of, or operate a pool with a drain cover or drain grate unless it is over or in front of:
 - (1) The sump that is recommended by the drain cover or grate manufacturer;
- (2) A sump specifically designed for that drain by a professional engineer who is registered in this State, an architect who is registered in this State; or
 - (3) A sump that meets ASME standards.
- 4. Notwithstanding Section 3, all public pools must comply with this section. The pool owner or pool operator shall retrofit by December 31, 2010 each pool recirculation system on existing pools that do not meet the requirements of this section. The owner or operator shall meet the retrofit requirements of this subsection by any of the following means:
- (a) Meet the requirements of this section and install a safety vacuum release system which ceases operation of the pump, reverses the recirculation flow, or otherwise provides a vacuum release at a suction outlet when it detects a blockage; that has been tested by an independent third party; and that conforms to ASME or ASTM International standards;
- (b) To ensure proper operation, the pool operator shall inspect and test the vacuum release system at least once a week but no less often than established by the manufacturer. The pool operator shall test the vacuum release system in a manner specified by the manufacturer. The pool operator shall log all inspections, tests and maintenance and retain the records for a minimum of two years for review by the health authority upon request.
- (c) The vacuum release system must include a notification system that alerts patrons and the pool operator when the system has inactivated the recirculation system. The pool operator shall submit to the health authority for approval the design of the notification systems before installation. The system must activate a continuous clearly audible alarm that can be heard in all areas of the pool or a continuous visible alarm that can be seen in all areas of the pool. An easily readable sign must be posted next to the sound or visible alarm source. The sign must

state, "DO NOT USE THE POOL IF THIS ALARM IS ACTIVATED." and provide the phone number of the pool operator.

- (d) Install an outlet system that includes no fewer than two suction outlets separated by no less than 3 feet (0.91) meters, on the horizontal plane as measured from the centers of the drain covers or grates or located on two different planes and connected to pipes of equal diameter. The outlet system must meet the requirements of these regulations.;
- (e) Meet the requirements of these regulations regarding the installing (or having an existing) gravity drain system where, rather than drawing directly from the drain, the pump draws from a surge or collector tank wherein the contained water surface is maintained at atmospheric pressure;
- (f) Install a drain of a size and shape that a human body cannot sufficiently block to create a suction entrapment hazard that meets the requirements of these regulations; or
- (g) Any other system determined by the federal Consumer Products Safety Commission to be equally effective as, or better than, the systems described in the "Virginia Graeme Baker Pool and Spa Safety Act" at preventing or eliminating the risk of injury or death associated with pool drainage systems.

Sec. 163

Water piping.

- 1. The water velocity in the piping of a public bathing or swimming facility must not exceed 10 feet (3.04 meters) per second for discharge piping, except that the velocity for copper pipe must not exceed 6 feet (1.82 meters) per second. Suction velocity for piping must not exceed 6 feet (1.82 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 established by the NSF International.
 - (b) In the absence of an applicable standard, be approved by the health authority.
 - 3. Pipes must be clearly 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 (7.63 centimeters per 30.48 meters) or 0.25 percent. Gravity waste lines around any pool 6 inches (15.24 centimeters) or smaller must have a minimum slope of one-quarter of an inch per foot (6.4 millimeters per 30.48 centimeters) or 2 percent. Lines larger than 6 inches (15.24 centimeters) and all outfall main lines must be designed with a size of pipe and slope to carry freely the maximum flows.

6. Piping around the pool 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.

Sec. 164

Pumps and motors.

- 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. 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.
- 4. 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 re-drilling mounting holes or otherwise altering the replacement part of the pump.
 - 5. The pump and component parts must be designed and constructed to operate safely.
- 6. 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.
- 7. The motor must be non-overloading 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.
- 8. A pump performance curve for the unit to be installed must be provided with the plans submitted for approval.
 - 9. A pump used in a recirculation system must:
 - (a) Comply with all applicable requirements of the NSF International.
 - (b) In the absence of an applicable standard, be approved by the health authority.
- 10. 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.
- 11. 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.
- 12. 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.
 - 13. The motor frame must include adequate provisions for proper grounding.

Arrangements for overflow. 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 pool may be installed or built if a safety hazard may result.

Sec. 166

Gutters.

- 1. Overflow gutters must extend completely around the pool, except at steps, ramps, or recessed ladders. The gutter system must be capable of continuously removing pool water at 100 percent of the maximum flow rate. This system must be connected to the recirculation system by means of a surge tank.
- 2. A pool having a surface area of over 3,500 square feet (35.16 square meters) must have overflow gutters. A pool having a surface area less than 3,500 square feet (35.16 square meters) must have either overflow gutters or skimmers provided.
- 3. 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 (6.35 centimeters) for the top 2 inches (5.08 centimeters).
- 4. 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.
- 5. 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.
- 6. The overflow gutter depth below the lip must be a minimum of 3 inches (7.62 centimeters) at the high points between the drains. The drains must be spaced at a maximum of 15 feet (4.57 meters) between centers and a slope provided in the bottom of not less than 2 1/2 inches in 10 feet (6.35 centimeters in 3.04 meters) or 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 (5.08 centimeters).
- 7. 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.
- 8. The opening into the gutter beneath the coping must be not less than 4 inches (10.16 centimeters) and the interior of the gutter must be not less than 3 inches (7.62 centimeters) wide.
- 9. Overflow gutters must be designed and constructed in compliance with the following requirements:

- (a) The opening into the gutter beneath the coping must be at least 3 inches (7.62 centimeters) in height with a depth of at least 3 inches (7.62 centimeters).
 - (b) Gutters must be designed to prevent entrapment of any part of a bather's body.
- (c) The edge must be rounded so it can be used as a handhold and must be no thicker than 2.5 inches (6.35 centimeters) for the top 2 inches (5.08 centimeters).
- (d) Gutter outlet pipes must be at least 2 inches (5.08 centimeters) in diameter. The outlet grates must have clear openings and be equal to at least one and one-half times the cross sectional area of the outlet pipe.
- 10. 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.
- 11. The gutter must be capable of removing 50 percent or more of the recirculated water and returning it to the recirculation system.

Skimmers.

- 1. Each pool must be provided with at least one skimmer for each 400 square feet (37.16 square meters), or fraction thereof, of the pool area.
- 2. Skimmers complying with NSF International or equivalent are permitted on any pool with not more than 3,500 square feet (325.15 square meters) of surface area.
- 3. Where two or more skimmers are required, they must be spaced to provide an effective skimming action over the entire surface of the pool.
 - 4. There must be no fewer than two skimmers in every pool.
 - 5. Any skimmer used in a pool must be approved by the NSF International.
- 6. 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).
 - 7. All inlets must be spaced at least 5 feet (1.52 meters) away from any skimmer.
- 8. One skimmer must be placed at a point in the pool opposite the direction of prevailing summer winds.
- 9. 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.
- 10. Skimming devices must be built into the pool wall and must meet the following general specifications:

- (a) The piping and other components of a skimmer system must be designed for a total capacity of at least 80 percent of the maximum flow rate of the circulation system.
- (b) Skimmers must be designed with a minimum flow rate of 25 gallons (94.63 liters) per minute and a maximum flow rate of 55 gallons (208.19 liters) per minute.
- 11. Alternatively, skimmers may also be designed with a minimum of 3.125 gallons (11.83 liters) to 6.875 gallons (26.02 liters) per lineal inch (2.54 centimeters) of weir.
- 12. Each skimmer weir must be automatically adjustable and must operate freely with continuous action to variations in water level over a range of at least 4 inches (10.16 centimeters). The weir must operate at all flow variations.
- 11. An easily removable and cleanable basket or screen through which all overflow water passes, must be provided to trap large solids.
- 12. The skimmer must be provided with a device to prevent air-lock in the suction line. These devices may include an equalizer pipe, surge tank, or other arrangement that will assure a sufficient amount of water for pump suction in the event the pool water drops below the weir level.
 - (a) If an equalizer pipe is used, the following requirements must be met:
- (1) An equalizer pipe must be sized to meet the capacity requirements for the filter and pump.
 - (2) An equalizer pipe may not be less than 2 inches (5.08 centimeters) in diameter.
- (3) This pipe must be located at least 1 foot (30.48 centimeters) below a valve or equivalent device that will remain tightly closed under normal operating conditions. In a shallow pool, such as a wading pool, where an equalizer outlet cannot be submerged at least one foot below the skimmer valve, the equalizer pipe must be connected to a separate outlet with an anti-entrapment cover in the floor of the pool.
 - (4) The equalizer pipe must have an anti-vortex cover.
 - (b) The skimmer weir and basket must be maintained in a clean and sanitary condition.

Filters.

- 1. Any filter used in a pool must meet NSF International requirements or in the absence of applicable requirements, be approved by the health authority.
 - 2. The filter must be provided with influent pressure gauge.
- 3. The filter 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.
- 4. A means must be provided to permit release of air which enters the filter tank. This may be automatic, manual, or, when up-flow 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.

- 5. Filter elements which require servicing must be accessible and available for inspection and repair.
 - 6. Filters must be designed so that filtration surfaces can be easily inspected and serviced.
- 7. Filter rate must not exceed the rate approved by the manufacturer for that particular filter.
- 8. Separation tanks or settling sump are required with diatomaceous earth filters. Separation tanks must:
- (a) Be provided with a manual means of air release or a lid which provides a slow and safe release of pressures and
- (b) Have a precautionary statement affixed warning the user that the air release must be opened before starting the recirculation pump.
- 9. 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.

Strainers.

- 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 (3.18 millimeters) 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.

Sec. 170

Vacuum cleaners.

- 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.

Water Heating

Sec. 171

Heating units. 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.

- 1. Fired water heaters installed after the effective date of these rules, used exclusively for heating water for swimming pools are considered pool boilers and are exempt from the requirements of Boiler and Pressure Vessel Law if:
- (a) Units are equipped with a flow switch or pressure switch set at a minimum of 1-1/2 psi;
 - (b) No intervening stop valves are installed on the discharge side of the unit;
 - (c) Discharge piping is not reduced from the engineering sizing of the fired heater;
- (d) All units are equipped with an ASME approved pressure and temperature relieving device set at 50 psi;
- (e) The unit has a maximum of 10 gallons (37.85 liters) capacity contained within the unit; and
 - (f) The burner is wired in series with the recirculation pump.
- 2. Where fuel burning swimming pool heaters are provided for public swimming pools, they must:
 - (a) Be situated so that the pilot light, if present, is readily accessible;
 - (b) Be provided with an adequate supply of combustion air; and
- (c) Be equipped with metal or chlorinated polyvinyl chloride pipe (CPVC) for a minimum of 18 inches (45.74 centimeters) upstream and downstream of the heating equipment. However, where manufacturer's recommended installation allows shorter lengths of CPVC, installation according to manufacturer's recommendations is allowed in lieu of 18 (45.74 centimeters) inches of CPVC if documentation of manufacturer's recommendations is provided.
- 3. Where electrical heaters are provided, they must be installed in accordance with applicable state laws. When required by Underwriters Laboratory, metallic current collectors must be installed on the inlet and outlet of the heater. The current collectors must be grounded and must be at least 5 pipe size diameters in length.

Sec. 172

Solar Heating Installations. Solar heating systems must be approved in writing by the health authority before they are installed.

Water Treatment

Sec. 173

Disinfectants: Approval of use of chemical feeders and other disinfecting materials and methods.

- 1. A public bathing or swimming facility must be equipped with a chlorinator, brominator hypochlorinator or other disinfectant feeder which can effectively remove or neutralize organic matter in water. Except as otherwise provided in subsections 2 and 3, chemical feeders and process equipment, other than compressed chlorine gas feeders, must meet NSF International requirements.
- 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. 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 these regulations.
- 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.

Sec. 174

Disinfectants: Use of chlorine gas. An owner of a public bathing or swimming facility who obtained his 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 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 gas tight 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 $55^{\circ}F$ (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 back-flow 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 or in buildings where sleeping guests are housed.

Disinfectants: Handling; storage; toxicity.

- 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 shock treatment, super-chlorination, super-bromination 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 these regulations.
- 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 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 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.

Sec. 176

Water testing equipment.

- 1. Every public bathing or swimming facility must have an approved test kit for the determination of pH, the determination of pH, free available chlorine, total available chlorine if chlorine is used, bromine or other chemical disinfectant residuals, cyanuric acid (if used), total alkalinity, calcium hardness, and copper and silver if a copper or copper/silver ionization unit has been installed.
- 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.

Electrical

Sec. 177

Electrical requirements.

- 1. All new electrical wiring in a public bathing or swimming facility must conform with the design specification submitted by a qualified professional and 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 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.

Sec. 178

Lighting.

- 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) Must not permit any use of the facility or bathing place after dark.

- (b) Must 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.
- 8. Wiring for lighting may not be routed under a pool or within the area extending 5 feet, (1.52 meters) horizontally from the inside wall of the pool as provided in Article 680, Swimming Pools, Fountains, and Similar Installations I of the "National Electrical Code", without the written approval of the health authority.
- 9. The health authority may deny the installation and use of any electrical appliance, device, or fixture, if its power service is routed under a pool or within the area extending 5 feet (1.52 meters), horizontally from the inside wall of the pool, except in the following circumstances;
 - (a) For underwater lighting,
 - (b) Electrically powered automatic pool shell covers or
 - (c) Competitive judging, timing, and recording apparatus.

Water Recreation Attractions

Sec. 179

Consultation regarding design of attraction. The qualified professional 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 these regulations and
- 2. Changes in the design of the attraction that may be necessary as a result of the noncompliance.

Sec. 180

Posting signs indicating maximum depth. 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.

Sec. 181

Qualifications of attendants. Except as otherwise provided in these regulations, 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;
- 2. Otherwise trained to deal with safety and public health hazards related to the particular attraction at which he is employed and
 - 3. Knowledgeable about the contents of the plan for attendants.

Plan for attendants.

- 1. The operator of each water recreation attraction shall establish a plan for attendants at the attraction and 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.

Sec. 183

Play toy equipment.

- 1. Play toy equipment may be built at pool facilities provided the following conditions are met:
 - (a) Can only be used at pools with a lifeguard;
 - (b) It must comply with the requirements of these regulations;
- (c) Its design must conform to ASTM International standards including establishing fall zones;
 - (d) Surfaces must be easily cleanable;
- (e) Their design and construction are within the limits of sound engineering practice and present no health or safety hazard and
- (f) Be operated in accordance with a written plan of operation developed by the owner, addressing placement of the toy, protection from falls, entrapment, entanglement of bathers, and visibility of users to lifeguards; and from each other.

Sec. 184

Deviation from requirements. A water recreation attraction may deviate from the requirements of these regulations 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.

Water slides: Design and construction.

- 1. A water slide must consist of one or more flumes, splash pools or slide run-outs, 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 to 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. All components must be securely fastened to the pool deck.
 - 5. Have a ladder equipped with slip-resistant treads and rigidly attached handrails.
 - 6. Slide runways must be water lubricated when in use.
- 7. The owner of a water slide and the qualified professional who designs the slide are responsible for the safe design and construction of the entire facility.

Sec. 186

Water slides: Flumes.

- 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 center-line 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.

Water slides: Exit from flume.

- 1. The exit of any flume must be designed to ensure that bathers enter the splash pool or slide run-out 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.

Sec. 188

Water slides: Exit into splash pool. 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 center-line of the flume and the center-line 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 (6.09 meters), if the flume ends above or below the normal operating level; and

- (2) Thirty feet (9.14 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.

Water slides: Splash pools.

- 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 (1.06 meters) from the normal operating level to the floor. This depth must be maintained for a distance of not less than 20 feet (6.09 meters) from the point of exit from the flume, or not less than 30 feet (9.14 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 step-holes 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.

Sec. 190

Water slides: Decks.

- 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 (6.35 millimeters per 30.48 centimeters) 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.

Sec. 191

Water slides: Means of access.

- 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 and
- (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.

Water slides: Run-outs

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

Sec. 193

Water slides: Pump reservoirs.

- 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.

Sec. 194

Water slides: Control of water.

- 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 back-flow protection must be provided.
- 2. The velocity of water at the weir or inlet grate must not exceed 1 1/2 feet (0.45 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.

Sec. 195

Water slides: Posting notice of prohibited conduct. The operator of a swimming pool shall post one or more warning signs at the entrance to the facility. Each sign must state in large bold letters at least two inches in height 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. Horse play.
- 3. Diving or flipping while exiting from a flume.
- 4. Use of the slide while under the influence of alcohol or drugs.
- 5. Failure to obey the instructions of the top pool supervisor or the lifeguard.
- 6. Failure to leave the landing pool promptly after exiting from the slide.
- 7. The use of any clothing on the slide other than the usual swimwear.

The operator of a swimming pool may post additional rules as necessary. All bathers must comply with posted rules.

Sec. 196

Water slides: Precautions for safety.

- 1. At all times while a water slide is open for use, an attendant must be on duty at each splash pool or slide run-out The attendant shall serve as the safety director of the slide. In that capacity, he shall control crowds, keep bathers moving through the pool or run-out in an orderly fashion, and control any unsafe behavior in the lower flumes, in the pool or run-out, 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 or other effective communication between the flume entry attendant and the splash pool or slide run-out attendant must be provided.
- 4. Each water slide must have a means to allow the flume entry attendant to monitor the slide exit.

Sec. 197

Activity pools.

- 1. The recirculation and filtration systems of activity pools must have a maximum turnover rate 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 recirculation or disinfection of the water.

Artificial swimming lagoons.

- 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 these regulations if its design and construction are within the limits of sound engineering practice and present no health or safety hazard.

Sec. 199

Child amusement lagoons.

- 1. The recirculation and filtration systems of child amusement lagoons must have a maximum turnover rate of 1 hour.
- 2. Amusement devices used in child amusement lagoons must be designed and maintained so that their surfaces are smooth with no abrasion hazards, slip resistant, nontoxic and easily cleanable. The devices must not pose a safety or health hazard to bathers and must not interfere with recirculation or disinfection of the water.

Sec. 200

Special purpose pools.

- 1. Special purpose pools may deviate from the requirements of these regulations 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 will require measures as he deems necessary to ensure the health and safety of bathers using a special purpose pool.

Sec. 201

Splash pads, splash fountains.

- 1. The water supply for a splash pad or fountain, or zero depth pools must be potable and at all times meet the requirements relating to water set forth in these regulations.
 - 2. Such pads and fountains must be designed to prevent the accumulation of water.
- 3. The deck of the area must be non-slip without abrasion hazards and designed and constructed to allow cleaning when necessary.
 - 4. The area must be away from traffic or other activities which may impact its use.

- 5. The water must be handled in the manner defined in these regulations for spray pools.
- 6. Aquatic play features may be incorporate into the design if they do not adversely affect public health or safety as determined by the health authority.

Spray pools.

- 1. The water supply for a spray pool must be potable and at all times meet the requirements relating to water set forth in these regulations.
- 2. The spray pool must be equipped at its low point with an unvalved drain of sufficient capacity and design.
- 3. If the water is captured and recirculated, the pool must meet the requirements for treatment and filtration as defined in these regulations. If potable water is used once and drained to waste the spray pool or water playground the following apply:
 - (a) Design spray pools with a zero-depth design, with no walls in the basin.
 - (b) Spray pools do not require devices for skimming.
- (c) All water recirculated through the spray features must be filtered and sanitized. Equipment capable of continuously supplying at least 0.25 ppm additional chlorine to the line returning water to the spray features must be provided, except when all the water is filtered and treated before being sent back to the water features.
- (d) The spray basin surfaces must be slip-resistant, without an abrasion hazard, easy to clean and water impervious. Impact attenuating surfaces, basin surfacing materials with shock absorbing properties, for use with equipment addressed in these regulations, will be considered, but must be water impervious, not conducive to bacteria and algae growth, and resistant to vandalism and damage. All impact cushioning materials must be approved by the health authority for use in a wet environment.
- (e) Spray pools do not require a security enclosure and must be provided with at least six feet (1.82 meters) of deck around the perimeter of the pool basin sloped away from the basin.

Sec. 203

Wading and spray pools, general requirements.

- 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 if adjacent to a swimming pool 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 these regulations.

- 4. Entrances and exits must be as far as possible from the deep end of a swimming pool.
- 5. Underwater lights are prohibited in wading pools.

Wading pools: Construction.

- 1. A wading pool must have:
 - (a) A maximum depth of 24 inches (60.96 centimeters);
 - (b) A slope which does not exceed 1 in 12; and
- (c) A slip-resistant finish without any abrasion hazards.
- 2. A wading pool must have a maximum turnover rate of 30 minutes. All wading pools must have a separate system for recirculation.
- 3. The outlets from the wading pool may be connected to a sanitary drain and skimmers 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 which complies these regulations.
 - 4. A wading pool must have at least two inlets.
- 5. All public wading pools that have submerged outlets must have at least two outlets for each pump.
- 6. The skimmer piping must be designed to handle 100 percent of the recirculation rate. All inlet fittings must have tamper-proof screws or attachments that cannot be removed except with tools. Inlet fittings will be in place whenever the pool is in use.

Sec. 205

Watercourse rides.

- 1. The recirculation and filtration systems of watercourse rides must have a maximum turnover rate 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 (3.21 kilometers per hour).

- 7. Rides must be constructed on concrete or other impervious materials with a non-toxic, smooth and slip resistant finish without abrasion hazards and be of shape and design as to be operated in a safe and sanitary manner.
- 8. Decking must be provided at the entrance and exit points as necessary to provide safe patron access but must not be smaller than 10 feet (3.04 meters) in width and length. Additional decking along the ride course is not required except that decking must be required at lifeguard locations and emergency exit points.
- 9. The design and construction must be within the limits of sound engineering practice and present no health or safety hazard.

Wave pools.

- 1. The generation of waves must not continue for more than 15 minutes at a time.
- 2. The recirculation and filtration system of wave pools must have a maximum turnover rate 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 approved by the health authority.
- 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.

Sanitary Facilities

Required facilities.

- 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. No difference in elevation, requiring steps, may exist in the interior of male or female dressing areas.
- 3. 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 (7.62 centimeters per 30.48 centimeters) or 25 percent and must be positively slip-resistant.
 - 4. The entrances and exits to the dressing areas must be screened to break the line of sight.
- 5. These facilities must be under the general supervision of the owner of the public bathing or swimming facility.
 - 6. 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.
- 7. For distances greater than that provided in paragraph (a) of subsection 6, the following minimum sanitary facilities must be provided in the bath house:

Men: 1 water flush toilet Women: 2 water flush toilets

1 lavatory 1 lavatory 1 shower 1 shower

- 8. Potable water must be provided at all shower heads. Water heaters and thermostatically controlled mixing valves must be inaccessible to bathers and must be capable of providing 2 gallons per minute (7.57 liters per minute) to each shower head for each bather.
- 9. Soap must be dispensed at all lavatories and showers. Soap dispensers must be constructed of metal or plastic. Use of bar soap is prohibited.
- 10. Fixtures must be designed so that they may be readily cleaned. Fixtures must withstand frequent cleaning and disinfecting.
 - 11. At least one covered waste can shall be provided in each restroom.

Sec. 208

General requirements.

- 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.

Minimum sanitary plumbing facilities.

- 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 four 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 because of 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.

Sec. 210

Plumbing requirements.

- 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 water.
- 3. If heated water is provided, the water heater and thermostatic mixing valve must be inaccessible to bathers and must be capable of providing 2 gallons (11.35 liters) per minute per shower head. 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.

Sec. 211

Floors.

- 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. Carpeting may not be installed on dressing room floors.
- 3. Where rubber or impervious mats are used they must be kept clean and dry between uses.

Sec. 212

Furnishings.

- 1. All furniture must be easily cleanable. Locker compartments, furniture, partitions and other appurtenances in dressing rooms must be installed 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 or similar equipment.
- 3. 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.
 - 4. All light fixtures must be adequately shielded to prevent injury to bathers.
- 5. Lockers must be set either on solid masonry bases 4 inches (10.16 centimeters) high or on legs elevating the bottom locker at least 10 inches (25.4 centimeters) above the floor and have louvers for ventilation.
 - 6. Shower stall floors must be non-slip, impervious surface without any abrasion hazard.
 - 7. Glass bath or glass shower doors must use safety glass.

Sec. 213

Ventilation.

- 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.

Sec. 214

Water quality.

- 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 these regulations.
- (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 (3,785.41 liters), or in 2 hours or less if the basin has a capacity of 1,000 gallons (3,785.41 liters) or more.
- (d) In all instances the bath lining must be of cleanable, impervious construction with no abrasion hazard and kept clean.
 - 2. If water is provided for drinking it must be potable water.

Sec. 215

Temperature.

- 1. The maximum water temperature in such baths is $104^{\circ}F$ ($40.0^{\circ}C$).
- 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.

Natural Bathing Places

Sec. 216

Permit required. A permit to operate a natural bathing place on any waters of this State must be obtained from the health authority.

Sec. 217

Standards for approval.

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 (1,892.70 liters) of water per bather when the greatest numbers of bathers are in the water.
- 3. Evidence of man-made 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 (3.71 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, cans, bottles 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.

Notices and markers.

- 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 (30.48 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 in contrasting characters not less than 4 inches (10.16 centimeters) in height, be clearly visible and maintained that way.

Sec. 219

Required facilities.

- 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 potable, 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. If lighting is not provided as required by this section, the operator of the facility or natural bathing place:
 - (a) Must not permit any use of the facility or bathing place after dark.
- (b) Must 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 of contrasting color, near each entrance to the facility or bathing place.
- 5. There must be telephone connections and transportation facilities available for emergency use.

Lifeguards.

- 1. There must be at least one lifeguard on duty for each 400 feet (121.92 meters) of beach front or major fraction thereof.
- 2. One lifeguard tower must be provided for each 600 feet (182.88 meters) of beach front or major fraction thereof. Each lifeguard tower must be equipped with a 20 inch (50.80 centimeters) lifesaving ring with 100 feet (30.48 meters) minimum of line, and a torpedo buoy with 50 feet (15.24 meters) of line.
- 3. If bathing is permitted beyond a depth of 5 feet (1.52 meters), a suitable boat equipped with a life ring, oars, and oarlocks or a paddle board must be provided for each 1,000 feet (304.80 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.

Sec. 221

When bathing prohibited. Bathing must not be permitted during time of undue turbidity caused by natural occurrences, water contamination or during electrical storms.

Operation and Management

Sec. 222

Operating permits.

- 1. No public bathing or swimming facility or natural bathing place may operate unless the operator has a current operating permit from the health authority.
- 2. The health authority will exercise the right to close facilities and bathing places not operating in conformity with those regulations.
- 3. The permit must be posted in a conspicuous place at or near the office of each facility or bathing place.

Fees for permits and review of plans.

- 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.

Sec. 224

Instructions on operation and maintenance of facilities and equipment.

- 1. Upon the completion of any public bathing or swimming facility, the owner and his operators must be given complete written 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.
- 2. All valves must be permanently tagged and a valve operating schedule must be provided for every operation.
- 3. The public pool owner and his operators shall develop an operation, maintenance and sanitation plan for the pool that will assure that the pool water meets the sanitation and quality standards required by these regulations.
- 4. The plan must be in writing and available for inspection by the health authority. At a minimum the plan must include the frequency of measurements of pool disinfectant residuals, pH and pool water temperature that will be taken. The plan must also specify who is responsible to take and record the measurements.

Sec. 225

Supervision and maintenance of facilities

1. Every public bathing or swimming facility including those owned by a homeowner's associations, those located by apartment buildings or hotels must be maintained under the supervision of a person who is responsible for the sanitation and safety of the facility and for the maintenance of its equipment and records.

2. The operator must knowledgeable about public pools and demonstrate to the health authority that he 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.

Sec. 226

Use of covers and solar blankets.

- 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.

Sec. 227

Records.

- 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 for at least two operating seasons. The records must be kept available to the health authority at all times.
- 2. The operator shall initial the record and the record must include, as appropriate for the facility or bathing place:
 - (a) The amounts and types of various chemicals used daily;
 - (b) The approximate amount of fresh water added daily;
- (c) The disinfectant residuals and pH measured at least upon opening of the facility and at a frequency to insure they meet the requirements of these regulations;
 - (d) The results of chemical and bacteriological tests;
 - (e) The time and date of emptying and cleaning the pool or back-washing filters;
 - (f) Recirculation operating time;
 - (g) The recirculation rates recorded at least once a day;
 - (h) The date and time of any chemical "shock treatments";
 - (i) The use of clarifiers or other agents; and
 - (j) Any other information which the health authority may require.
- 3. If oxidation reduction potential technology is used in accordance with these regulations, the operator may reduce water testing to once per day minimum.

Sec. 228

Lifesaving equipment.

- 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 (50.80 centimeters) to which there must be attached a length of 1/4-inch (0.64 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 (3.65 meters).
- 2. One unit is presumed to be adequate for 2,000 square feet (185.80 square meters) of pool or swimming area, and one additional unit must be provided for each additional 2,000 square feet (185.80 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 first aid kit, filled, ready for use and readily accessible for emergency use;
 - (b) Two or more blankets reserved for emergency use and
 - (c) A "Blood-borne pathogen cleanup kit".

Sec. 229

Emergency Plans. Every facility must develop emergency plans including but not limited to:

- (a) Injuries, swimmers in trouble, drownings;
- (b) Equipment breakdowns;
- (c) Chemical release;
- (d) Severe Weather;
- (e) *Fire*;
- (f) Threats to personnel, patrons, or the facility and.
- (g) Water contamination.

Sec. 230

Posting information on artificial respiration and emergency services.

- 1. 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.
- 2. 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.
- 3. At least one telephone must be located in the vicinity of the pool enclosure, but outside of the enclosure.
- 4. Emergency telephone numbers must be provided in a form that can be taken to a telephone.
- 5. 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.

Presence of lifeguards.

- 1. Except as otherwise provided in subsection 2, any public bathing or swimming facility, except an isolation and flotation tank, spray pool or fountain or such facilities 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 by a homeowner's association or solely for and in conjunction with a R.V park, mobile home park, apartment, condominium, hotel, motel or other place of lodging, or other facility containing multiple dwellings.
 - (b) The pool has a surface area of less than 2,000 square feet (185.80 square meters).
- (c) 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.

Sec. 232

Number of lifeguards required. 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.

Sec. 233

Qualifications, duties and identification of lifeguards.

1. Life guards must meet the definition in this regulation.

- 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.

Notices when lifeguards not provided. 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 (10.16 centimeters) in height. In addition, the sign must state "Children Under 14 Years Old Must Not Use Facility Without An Adult in Attendance," and "Solo Bathing is Prohibited."

Sec. 235

Capacity.

- 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 break-point to the shallow end is designated as the "non-swimming" area and the portion of the pool more than 5 feet (1.52 meters) deep or from the break-point 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:

Maximum bathing load = Non-swimming area (sq. ft.)/10 + Swimming area (sq. ft.)/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.

Sec. 236

Bathers: Requirements; prohibitions.

- 1. All bathers at a public bathing or swimming facility shall take a cleansing shower 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, including open blisters, cuts, or other lesions or inflamed eyes, any skin disease or any communicable disease or open sores or bandages must be excluded from the swimming pool.
- 4. Spitting, soiling, or in any way contaminating the water, walkways, or dressing room floors in the facility is prohibited.
- 5. Except as otherwise provided in these regulations, 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 activity or horse 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 or drugs 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.
- 10. A person who has or has had diarrhea within the last two weeks caused by an unknown source or from any communicable or fecal-borne disease may not enter any public pool.
- 11. Any child under three years old, any child not toilet trained, and anyone who lacks control of defecation shall wear a water resistant swim diaper and waterproof swimwear. Swim diapers and waterproof swimwear must have waist and leg openings fitted such that they are in contact with the waist or leg around the entire circumference.
- 12. Diapers must be changed only in restrooms or changing stations and must not be changed at poolside. The person or persons who change the diaper must wash their hands thoroughly with soap before returning to the pool. The diapered person must undergo a cleansing shower before returning to the pool.

Sec. 237

Bathers: Failure to comply with rules and regulations. 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 owner or operator shall promptly bring any action which may be necessary to prosecute or eject from the premises any such person.

Sec. 238

Swimming suits and towels.

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.

Sec. 239

Food and drinks. Food or drinks are not permitted in a public bathing or swimming facility, except in the spectator and visitor area.

Sec. 240

Restrictions on animals. Pool owners shall prevent animal access to a pool, except service animals in the deck area accompanying users or spectators requiring them.

Sec. 241

Cryptosporidiosis watches and warnings.

- 1. The health authority may issue cryptosporidiosis watches or cryptosporidiosis warnings as methods of intervention for likely or indicated outbreaks of cryptosporidiosis.
- 2. The health authority may issue a cryptosporidiosis watch if there is a heightened likelihood of a cryptosporidiosis outbreak.
- 3. The health authority may issue a cryptosporidiosis warning if there have been reports of cryptosporidiosis above the background level reported for the disease.
- 4. The health authority shall include the geographic area and pool type covered in the warning and may restrict certain persons from using public pools.
- 5. If a cryptosporidiosis watch or a cryptosporidiosis warning has been issued, the operator of any public pool shall post a notice sign that meets the requirements of this section and must be placed so that all patrons are alerted to the cryptosporidium targeted requirements before deciding whether to use the swimming pool.
- 6. The sign must be at least 17 inches, (43.18 centimeters) wide by 11 inches (27.94 centimeters) high and may need to be larger, depending on the placement of the sign. Centered on the sign must appear the words "CRYPTO DISEASE PREVENTION" in capital letters. The body of the notice sign must be in upper case letters at least 1.0 centimeter high and include the following four bulleted statements in black letters:

"All with diarrhea in the past 2 weeks shall not use the pool."

"All users must shower with soap to remove all fecal material before pool entry and after using the toilet or a diaper change."

"All less than 3 yrs or who wear diapers must wear a swim diaper and waterproof swimwear. Diapers may only be changed in restrooms or changing stations."

"Keep pool water out of your mouth."

- 7. If a cryptosporidium warning has been issued, each operator of a public pool subject to the warning must, at a minimum, carry out the following cryptosporidium counter measures:
- (a) Maintain the disinfectant concentration within the range between two ppm (four ppm for bromine) and the concentration listed on the product's Environmental Protection Agency mandated label as the maximum reentry concentration, but in no case more than five ppm (10 ppm for bromine);
 - (b) Maintain the pH between 7.2 and 7.5; and
- (c) Maintain the cyanuric acid level that meets the requirement of these regulations, except the maximum level must be reduced to 30 ppm.
- (d) In addition to the requirements listed the owner or operator of a public pool shall carry out any additional cryptosporidium countermeasures sufficient to achieve at least a 99.9 percent destruction or removal of cryptosporidium oocysts twice weekly.
- 8. Table in this section lists examples of chlorine concentrations and time periods that may be used to achieve the required contact time (CT) value. The operator shall not allow anyone to use the pool if the chlorine concentration exceeds the Environmental Protection Agency maximum reentry concentration listed on the product's label, but in no case if the concentration exceeds five ppm.

Chlorine Concentration and Contact Time to Achieve CT = 15,300 minutes

Chlorine Concentration	Contact Time
1.0 ppm	15,300 minutes (255 hours)
10.0 ppm	1,530 minutes (25.5 hours)
20.0 ppm	765 minutes (12.75 hours)

- 9. The operator of any public pool not required to have a lifeguard shall hyperchlorinate at least once weekly.
- 10. If using a full flow ultraviolet treatment system it must meet the requirements of NSF International. The owner or operator shall ensure that the system is installed and operated according to the manufacturer's recommendations.
- 11. If an ozone treatment system is used, it must achieve a CT value of 7.4 and a flow-through rate at least four times the volume of the pool every three and a half days. The system must meet the requirements of NSF International. The owner or operator shall ensure that the system is installed and operated according to the manufacturer's recommendations.
- 12. If a cryptosporidium oocyst-targeted filter system is installed and operated according to the manufacturer's recommendations it must meet the requirements of these regulations. The owner or operator shall maintain and make available for inspection the manufacturer's documentation.
- 13. The health authority's approval of a system for use as an alternative to those listed must be based on the system's documented ability to achieve cryptosporidium removal or inactivation to a level at least equivalent to the requirements in these regulations; assure safety for swimmers and pool operators; and comply with all other applicable rules and regulations.

- 14. If the health authority issues a restriction on the use of public pools by certain persons as part of the cryptosporidium warning the operator shall restrict persons within that segment of the population from using the facility.
- 15. If the health authority determines that a pool is a cryptosporidiosis threat to public health, he may order the pool to close. The owner or operator of the pool may not reopen until it has been rescinded by the health authority.

Sec. 242

Fecal Incidents. Fecal incidents must be reported to the health authority at the time the incident is noticed by the operator. At which time the swimming pool will be closed for a period of time as calculated in the United States Environmental Protection Agency's (EPA) guidance manual, "Disinfection Profiling and Benchmarking."

The closure time for the swimming pool must be the time required to achieve the correct contact value (CT, mg - min/L) for a 3-log inactivation of Giardia cysts by free chlorine, at a pH of 6.0 to 9.0. The manual may be downloaded via the Internet at no cost at: http://www.wqts.com/pdf/1999-03_DisinfectionProfiling.pdf and http://www.epa.gov/ogwdw000/mdbp/pdf/profile/lt1profiling.pdf

Sec. 243

Fecal Accident Procedures.

- 1. The operator shall respond to all discovered releases of fecal matter into a public pool in accordance with the following protocol: Centers for Disease Control and Prevention, "Fecal Accident Response Recommendations for Pool Staff and Notice to Readers--Revised Guidance for Responding to Fecal Accidents in Disinfected Swimming Venues". The manual may be downloaded via the Internet at no cost at: http://www.cdc.gov/healthyswimming/pdf/Fecal_Incident_Response_Recommendations_for_P ool Staff.pdf
- 2. The operator shall include in the records required in these regulations, the information about all fecal matter releases into a public pool. The records must include date, time, and where the fecal matter was discovered; whether the fecal matter was loose or solid; and the responses taken.
- 3. The health authority may approve the alteration of the required Centers for Disease Control protocol for the hyper-chlorination step for a loose fecal release if an operator is able to achieve a 99.9 percent kill or removal of cryptosporidium oocysts in the entire pool system by another method such as ultraviolet light, ozone, or enhanced filtration before allowing bathers to reenter the pool.

Compliance and Enforcement

Sec. 244

Notice of violation. If the health authority inspects a public bathing or swimming facility or natural bathing place and finds a violation of any provision of these regulations that does not seriously endanger the public health, he shall issue a written notice of the violation to the owner or his representative and allow a reasonable time for the violation to be corrected.

Sec. 245

Suspension or denial of operating permit.

- 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 he finds one or more of the following:
- (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 these regulations.

In lieu of suspension or revocation of a permit, a swimming pool or recreational water park attraction may be allowed to voluntarily close until the violations are corrected.

Sec. 246

Order for closure; revocation of suspended permit.

- 1. If the health authority orders the closing of a public bathing or swimming facility or natural bathing place, he will issue a written order to the owner or operator of the facility or bathing place, or his representative, stating with particularity the reason for the order of closure along with his 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.

Sec. 247

Procedure for review of actions taken by Health Division; appeals.

- 1. A person who has reason to believe that an action taken by the Health Division pursuant to these regulations 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 Health Division 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 Health Division, except that the informal conference must be held no later than 60 days after the date on which the Health Division received the written request.
- 3. Except as otherwise provided in subsection 4, the determination of the Health Division 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 these regulations who is aggrieved by an action of the Health Division relating to the denial of an application for or renewal of a permit or license or the suspension or revocation of a permit or license may appeal that action in accordance with these regulations after exhausting the informal procedures set forth in this section, except that the Health Division may waive the informal procedures, or any portion thereof, by giving written notice to the aggrieved person.

Sec. 248

Re-inspection.

- 1. After the specified corrective action has been taken, the owner or operator or his representative shall notify the health authority that the facility or bathing place is ready for reinspection
- 2. If upon re-inspection the corrective action is approved, the health authority will order the reinstatement of the operating permit, at which time the facility or bathing place may be opened for use.

3. If upon re-inspection 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.

NAC 444.010 through 444.306 are hereby repealed.

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]

"Hydrotherapy Pool" means a pool designed primarily for medically prescribed therapeutic use.

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 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 non-swimming 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 is 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 seal and signature on any plans and specifications submitted to the health authority. A licensed contractor shall include his 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 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 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 agent may be required to hire a third party inspector. The third party inspector may be selected by the owner or his 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 man, 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.

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

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 NAC 444.1958, 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 NAC 444.1958, 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 NAC 444.196 and 444.1995, 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 over-fall fill spouts, surge tanks or receptors, for adding makeup water.

- 2. Water used to fill any pool must be supplied by an over-fall fill spout providing an airgap of not less than 6 inches (15 centimeters) between the flood level at the pool and the lowest point of the fill spout, or an over-fall 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 NAC 444.010 to 444.306, 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 NAC 444.207, 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 NAC 444.198 to 444.1995, inclusive, and 444.202, 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)

NAC 444.158 Drains. (NRS 439.200, 444.070)

- 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 NAC 444.1968, 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.

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

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 NAC 444.148.
- 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 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 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 NAC 444.010 to 444.306, 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 he 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)

NAC 444.1954 Water slides: Exit from flume. (NRS 439.200, 444.070)

- 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 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 $3 \frac{1}{2}$ 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 NAC 444.010 to 444.306, 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 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 NAC 444.010 to 444.306, 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 Women: 1 water flush toilet

1 lavatory 1 lavatory 1 shower 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 NAC 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 man-made 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 NAC 444.274. 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 after one [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 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 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:

Maximum Nonswimming Area
$$+$$
 Swimming Area $(ft.^2)$ Bathing Load $= (ft.^2)$ 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 NAC 444.288, 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, he shall issue a written notice of the violation to the owner or his 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 he 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 NRS 444.065 to 444.120, inclusive, and NAC 444.010 to 444.306, 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, he shall issue a written order to the owner or operator of the facility or bathing place, or his representative, stating with particularity the reason for the order of closure along with his 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 NAC 444.010 to 444.306, 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 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)