

Title 20. Public Health and Welfare

Chapter I. Generally, Department of Health

Subchapter E. Environmental Health

Part 136. Rules Pertaining to Swimming Pools and Other Related Facilities

Codification Notes. This part as promulgated prior to codification into the Code of Arkansas Rules provided as follows:

"Effective August 1, 2012"

"SECTION I. AUTHORITY. The following Rules Pertaining to Swimming Pools and Other Related Facilities are duly adopted and promulgated by the Arkansas State Board of Health Pursuant to the authority expressly conferred by the Laws of the State of Arkansas including without limitation, Act 96 of 1913, as amended (A.C.A. 20-7-109), and Act 623 of 1987, as amended (A.C.A. 20-30-103 et. seq.)."

"CERTIFICATION

This will certify that the foregoing Rules Pertaining to Swimming Pools and Other Related Facilities were adopted by the Arkansas Department of Health at the regular session of the Board of Health held in Little Rock, Arkansas on the 26th day of April, 2012.

Paul Halverson, DrPH, FACHE Director and State Health Officer Arkansas Department of Health"

Subpart 1. Generally

20 CAR § 136-101. Purpose.

To protect the health of the citizens of Arkansas by establishing criteria for the design, operation, and maintenance of public swimming pools and other related facilities.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-102. Definitions.

As used in this part:

(1)(A) "Alteration/renovation" means replacement of any portion of the recirculation system including pool/spa plumbing or perimeter overflow/skimmer equipment, pumps, filters, or disinfection units, or modification of the physical structure of the pool or spa, or any change that would not conform to the original specifications.

(B) This does not include repair of small sections of pipes due to leaking or maintenance activities such as painting, plastering, or acid washing;

(2) "ANSI" means the American National Standard Institute, Incorporated;

(3)(A) "Antientrapment drain or cover" means a drain with a raised cover or design which allows horizontal flow of water into the drain rather than a vertical flow.

(B) The purpose of the design is to prevent the dangerous suction effect on a body, limb, hair entanglement, or physical object which may come in contact with the drain;

(4) "APSP" means Association of Pool and Spa Professionals;

(5) "Automatic controllers" means integrated electrical/electronic equipment, connected to chemical feed equipment which continuously monitors and controls the pH level and chlorine/bromine residual of swimming pool water;

(6) "Backflow preventer" means a device used to protect a water supply from contamination or pollution;

(7) "Backwash" means the process of thoroughly cleansing the filter media and/or elements and the contents of the filter vessel;

(8)(A) "Barrier" means a wall, building, fence, or any combination of these which control access to the pool area.

(B) This barrier shall be of such construction as to provide reasonable protection for the safety of the public;

(9)(A) "Break point chlorination" means the process of adding enough free chlorine to chemically oxidize and remove combined chlorine (chloramines) from pool or spa water.

(B) Commonly referred to as shocking a pool.

(C) The additional free chlorine amount needed is typically calculated: Ten (10) times the combined chlorine (CC) amount minus the existing free chlorine (FC) residual.

$(10 \times CC) - (FC) =$ amount of additional chlorine needed to shock the pool;

(10) "Cartridge filter" means a filter that utilizes a porous material as its media;

(11) "CDC" means Centers for Disease Control and Prevention;

(12)(A) "Chlorine demand" means the materials in the water which use up chlorine such as:

- (i) Bacteria;
- (ii) Algae;
- (iii) Dirt;
- (iv) Leaves; and
- (v) Swimmer wastes.

(B) The chlorine demand must be satisfied before a chlorine residual is available to disinfect the pool water;

(13)(A) "Chlorine residual" means the chlorine level in the water after the chlorine demand has been satisfied.

(B) The free chlorine residual is the:

- (i) True measure of potential chlorine disinfection; and
- (ii) Active chlorine that kills bacteria and algae.

(C) The active form of chlorine in water is known as hypochlorous acid;

(14) "Combined chlorine" means the amount of chlorine that has reacted with the organic substances in the water, forming compounds known as chloramines;

(15) "Controlled limited-use spa" means any spa where access to the spa unit is strictly controlled by the management by one (1) or more of the following:

(A) Location of the unit, e.g., installed in individual rooms with sleeping accommodations or on decks for individual units such as cabins;

(B) The number of patrons allowed to use the spa at any one time, e.g., in massage therapy, wellness centers, or similar operations with supervised use;

(C) Locked control panels where use of the spa must be scheduled through the management; and

(D) Limiting the hours of use, e.g., in retirement centers;

(16) "Coping" means the covering which joins the top of the pool wall with the decking and is considered part of the deck;

(17)(A) "Critical item" as stated in Acts 1987, No. 623, means those aspects of operation or conditions of facilities or equipment, which, if in violation constitute the greatest hazards to health and safety, including imminent health hazard.

(B) Any pool may be subject to immediate closure whenever a critical item or items are noted.

(C) These include:

(i) Restriction of employees with infection;

(ii) Approved water supply, hot and cold running water under pressure;

(iii) Sewage, liquid waste disposal;

(iv) No cross connection, back siphonage;

(v) Safety;

(vi) Excessive turbidity;

(vii) Failure to maintain proper chemical levels;

(viii) Failure or lack of filtration, sanitizing, and cleaning equipment and chemicals; and

(ix) Absence or lack of required supervisory personnel;

(18) "Cross connection" means any physical arrangement connecting:

(A) A potable water system directly or indirectly with anything other than another potable water system; or

(B) Pool water to any potable or nonpotable water source capable of contaminating either the pool water, its components, or portable water source due to backflow;

(19) "DE" means diatomaceous earth;

(20) "Dead spots" means places in the pool/spa where filtered/disinfected water does not reach because of poor circulation;

(21) "Department" means the Department of Health or, where required, employees authorized by the Department of Health;

(22) "Diatomaceous earth (DE)" means the type of filter medium that is:

(A) Obtained from the fossil remains of microscopic marine organisms;
and

(B) Used in a thin coating over the filter septa;

(23) "Fill-and-draw pool or spa" means a pool or spa which is drained, cleaned, and refilled after each individual use;

(24) "Filter" means a device that separates solid particles from pool water by recirculating through a porous substance (filter media or cartridge element);

(25)(A) "Filter media" means the fine material which entraps suspended particles from the water.

(B) These include sand, DE, and sand/DE substitutes;

(26) "Filter septa" means that part of the filter element consisting of cloth, wire, screen, or other porous material on which DE or similar media are deposited;

(27) "fps" means feet per second;

(28) "General public" means all people without restriction;

(29) "gpm" means gallons per minute;

(30) "Hose bibb" means a water faucet with male screw threads for attaching a hose;

(31)(A) "Hydrostatic relief valve" means a device used to relieve ground water pressure imposed on the outer shell of the pool.

(B) These are usually installed in the main drain or drains;

(32) "Imminent health hazard" means any condition, deficiency, or practice which, if not corrected, is very likely to result in illness, injury, or loss of life to any person;

(33) "Inlet" means the fitting or opening through which filtered water enters the pool;

(34)(A) "Lifeguard" means an individual who has demonstrated competency in water safety and lifesaving.

(B) The pool owner shall determine competency;

(35)(A) "Main drain" means the outlet or outlets at the bottom portion of the pool or spa.

(B) These outlets are suction outlets connected to the recirculation piping;

(36) "Maximum flow rate" means the maximum filtration rate times the square footage of filter provided, i.e., $\text{GPM/sq. ft.} \times \text{sq. ft. of filter area} = \text{GPM}$;

(37)(A) "Minimum flow rate" means the least flow of water measured in gpm through the water treatment system that must be maintained to provide adequate treatment.

(B) GPM is calculated by dividing the volume of the pool, in gallons, by the required turnover time, in minutes;

(38) "NSF" means the National Sanitation Foundation;

(39) "Overflow system" means perimeter type overflow, surface skimmers, and surface water collection systems of various design and manufacture;

(40) "Perimeter overflow" means a gutter or trough around the inside of the pool walls, with the overflow lip effecting a skimming action to clean the pool water surface;

(41) "Person" means:

(A) Any individual;

(B) Any partnership;

(C) Any firm;

(D) Any corporation;

(E) Any agency;

(F) Any municipality;

(G) Any state or political subdivision; or

(H) The federal government and its agencies and departments;

(42) "pH" means the measure of the degree of acid or alkaline qualities a solution possesses, as determined by its hydrogen ion content:

(A) A pH below seven and zero tenths (7.0) is considered acid;

(B) A pH of seven and zero tenths (7.0) is considered neutral; and

(C) A pH above seven and zero tenths (7.0) is considered alkaline;

(43) "Pool area" means the water surface and deck area;

(44) "Pool deck" means the paved area around the pool including the coping;

(45) "Pool operator" means the person or persons responsible for the daily maintenance and operation of the pool or other related facility;

(46) "Pool/spa depth" means the distance between the floor of the pool and the normal operating water level when the pool or spa is in use;

(47) "ppm" means parts per million;

(48) "Precoat pot" means a hopper with a valved connection to the suction side of the recirculation pump of pressure DE filter systems that are used for coating the filter media prior to filtering water through the system;

(49)(A) "Public swimming pool" as stated in Arkansas Code § 20-30-101 et seq., means a structure of all man-made materials, located either indoors or outdoors, used for bathing or swimming, together with buildings, appurtenances, and equipment used in connection therewith.

(B) Included are spa-type, wading, special purpose pools, or water recreation attractions, including but not limited to those operated at apartment buildings, municipalities, counties, institutions, schools, motels, hotels, and mobile home parks to which admission may be gained with or without payment of a fee.

(C) This definition shall not apply to private pools at single-family residences.

(D) For the purposes of this part, public swimming pools have been categorized into the following classes:

(i) "Class A pool" means any pool intended for, or used by, the general public for recreational use, owned and operated by any:

- (a) Person;
- (b) Firm corporation;
- (c) Institution;
- (d) Association;
- (e) Club; or
- (f) Any political subdivision of the State of Arkansas;

(ii)(a) "Class B pool" means any pool not open to the general public but open rather to a limited group, such as institutions, schools, childcare facilities, resident subdivisions, or similar developments, camps, day camps, recreational facilities, or pools of similar usage and type, or any pool whose use is restricted to residents, members, or registered guests, including but not limited to:

- (1) Hotels;
- (2) Motels;
- (3) Apartments;
- (4) Trailer parks/mobile home parks; and
- (5) Churches and condominiums.

(b) Also included are:

- (1) Country clubs;
- (2) YWCA or YMCA health or athletic clubs; and
- (3) Pools of similar type and usage;

(iii)(a) "Class C special purpose pool" means any pool whose design and/or use is significantly different from a swimming pool.

(b) This includes, but is not limited to:

- (1) Water recreation attractions;
- (2) Scuba pools;
- (3) Zero depth entry pools;

(4) Instructional pools;

(5) Water slides;

(6) Spray grounds; and

(7) Spray pools; or

(8) Any pool intended for use for accredited competitive aquatic events such as Federation International de Natation Amateur (FINA), United States Swimming, United States Diving, National Collegiate Athletic Association (NCAA), National Federation of State High School Associations (NFSHSA), etc.

(c) The pool may also be used for recreation;

(iv) "Class D wading pool" means a small pool for nonswimming children with a maximum depth not greater than twenty-four inches (24");

(v)(a) "Class E therapy pools/spas" means any treatment spa/pool and special spas/pools for water therapy.

(b) Fill-and-drain water therapy spas used for treatment of athletes or other medical treatment purposes are exempt from this part; and

(vi)(a) "Class F spas" means any commercial whirlpool, hot tub, or spa designed for recreation, or relaxation use, in combination with:

(1) Hydrojet circulation;

(2) Air induction systems; or

(3) Other circulation systems using hot, cold, or ambient water temperature.

(b) These facilities have a maximum water depth of four feet (4') and are not used for swimming or diving.

(c) This section does not apply to fill-and-draw spas, which are drained, cleaned, and refilled after each individual use.

(d) Spas operated in connection with bed and breakfast facilities with less than six (6) sleeping rooms and/or less than ten (10) guests are exempt from this part.

(e) Controlled, limited use spas shall be considered special purpose spas and will be evaluated on a case-by-case basis;

(50)(A) "Private residential pool" means any individually owned swimming pool which is built in connection with a single-family residence the use of which shall be confined to the family of the owner and his or her guests.

(B) This shall not include any type of cooperative housing or joint tenancy of two (2) or more families, and shall be located within the same property boundary as the family dwelling building to which it serves;

(51) "Rate-of-flow indicator" means a device installed on the pool recirculation piping or backwash line to indicate recirculation flow of the pool or backwash flow in gallons per minute;

(52) "Readily accessible" means an item or device that is capable of being reached and utilized quickly for operation, safety, or inspection purposes without requiring those to whom use is essential to climb over, remove obstacles, and search for intended item/device, or anything else that requires undue time to utilize;

(53) "Scuba pool" means a special purpose pool designed with the intent of training scuba divers;

(54) "Serious injury" means any injury:

(A) Requiring emergency service response where a person needs medical treatment as determined by the emergency response personnel; and/or

(B) Resulting in a person seeking medical attention at a hospital emergency room or admission to a hospital;

(55) "Spray pool/spray ground" means an artificial pool for use by children into which water is sprayed but is not allowed to pond in the bottom of the pool;

(56) "Stabilizer (cyanuric acid)" means a chemical that helps prolong the useful life of chlorine in the water by slowing down chlorine loss due to sunlight;

(57) "Surface skimmer" means a device used to remove surface debris from the pool over a self-adjusting weir;

(58)(A) "Surge tank" means a tank receiving the gravity flow water from the overflow gutter and main drain or drains from which the recirculation pump takes suction.

(B) This may also be referred to as a balance tank;

(59) "Turbidity" means a cloudy condition of the water due to the presence of extremely fine particulate materials in suspension that interfere with the passage of light;

(60)(A) "Turnover" means the period of time (usually in hours) required to circulate a volume of water equal to the pool capacity.

(B) The turnover rate is the number of times a quantity of water equal to the pool capacity passes through the filters within a stated time, usually turnovers per day;

(61) "UL" means underwriters laboratory;

(62)(A) "Water recreation attraction" means a swimming facility open to the general public with design and operational features that provides patron recreational activity which is different from that associated with a conventional swimming pool in that the purpose fully involves immersion of the body partially or totally in the water.

(B) "Water recreation attractions" include, but are not limited to:

(i) Water amusement lagoons;

(ii) Water slides; and

(iii) Wave pools; and

(63) "Water slide" means a special purpose facility which consists of:

(A) One (1) or more flumes;

(B) A plunge pool;

(C) Pump reservoir;

(D) Filtration;

(E) Disinfection; and

(F) Chemical treatment facilities.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-103. Compliance.

Any person, firm, corporation, institution, association, club, or governmental agency operating, maintaining, or constructing a swimming pool or related facility included herein shall be responsible for compliance with this part.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-104. Plan review and construction.

(a) Plans required.

(1) Before work is commenced on any new construction, any alteration of any existing pool, spa, or water recreation attraction, complete and detailed plans and specifications shall be submitted in triplicate to the Department of Health.

(2) Specific plan requirements are available upon request.

(3) Plans for all Class A pools or other pools as determined by the department shall be prepared by a professional engineer.

(4) All work shall be performed in compliance with the Arkansas state licensing law for contractors and laws of the State Board of Licensure for Professional Engineers and Professional Surveyors.

(5) Preliminary plans shall be submitted for review and design evaluation on all Class C pools (special purpose pools).

(b) Structural design not reviewed. The review of the plans and specifications does not include structural design or structural stability of any part of the pool construction.

(c) Deviation from plans.

(1) No part of the work shall be undertaken until the department has granted written approval of said plans.

(2) No deviations from the approved plans shall be made unless the proposed changes have been submitted to and approved by the department.

(d) Final construction inspection.

(1) No newly constructed or renovated public pool or other related facility shall be placed into operation until:

(A) A final inspection of the facility has been conducted; and

(B) Written authorization to operate is issued by the department.

(2) Notification to the department shall be made not less than ten (10) days prior to the need for a final construction inspection.

(3) In addition to the final inspection, the local department representative shall be notified:

(A) At the start of construction; and

(B) To inspect the piping in place prior to covering.

(4) The final construction inspection shall be made by a department representative or representatives in the presence of the pool owner and/or pool builder or pool designer to ascertain that the pool was constructed in accordance with the approved plans.

(e) Instructions for operation.

(1) Upon completion of the pool or other related facility, the builder shall provide the owner and/or his or her operator or operators with complete written and oral instructions on:

(A) The operation of the pool and all equipment;

(B) The chemistry of pool water; and

(C) Specific details concerning the maintenance of the equipment.

(2) The builder shall supply complete manufacturer's information on each of the component parts of the recirculation, filtration, and disinfection systems.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-105. Water.

(a) Water supply.

(1) **General.** The water supply for all pools, bather preparation facilities, water recreation attractions, and drinking water facilities included as adjuncts to the pool shall meet the Department of Health Rules Pertaining to Public Water Systems, 20 CAR pt. 140.

(2)(A) **Drinking fountains.** All drinking water shall be dispensed from angle-jet fountains equipped with a protective mouth guard or from a single-service container.

(B) A suitable protective container must be provided for dispensing the cups.

(3) **Cross-connections.** No piping arrangements shall exist which, under any conditions, will permit:

(A) Sewage or wastewater to enter the recirculation system; or

(B) Water from the recirculation system or pool to enter the make-up water supply.

(b) **Pool water quality.**

(1) **Clarity of water (excessive turbidity).**

(A) The water must be sufficiently clear to plainly view the main drain or drains from the deck of the pool at all times when the pool is open.

(B) The viewer must be able to clearly distinguish the type, shape, and number of gratings of the main drains when standing at the edge of the pool deck nearest that main drain.

(2) **Pool/spa water chemistry.** The water in all pools/spas shall meet the mandatory chemical parameters indicated in Appendix B:

(A) For free and combined chlorine or bromine, pH, total alkalinity; and

(B) Where stabilizer (cyanuric acid) is used.

(3) **Bacteriological water quality.**

(A) The department shall take samples for bacterial analysis for each pool whenever a suspected waterborne illness is reported.

(B) Any such sample shall be analyzed for E. coli bacteria in accordance with approved drinking water standard methods.

(C) The presence of any E. coli bacteria will indicate unsatisfactory water quality and the pool or other related facility shall be closed until a satisfactory water sample can be obtained.

(D) Procedures for disinfection and management of fecal accidents are provided in Appendix D.

(E) Other samples may be collected based on recommendations of the Centers for Disease Control and Prevention.

(4) Testing and sampling of pool water.

(A) Chemical water quality testing shall be conducted by the pool operator at such intervals as required by the department.

(B) Water chemistry tests will also be made by an authorized employee of the department at the time of inspection.

(C) This does not preclude a facility from utilizing testing facilities provided by a pool service company.

(c) **Make-up water facilities.** All water shall enter the pool through one (1) of the following:

(1)(A) An over-the-rim fill spout with an air gap two and one-half (2 1/2) times the pipe diameter above the pool coping level.

(B) The fill spout shall be rigid and properly located or shielded so as not to create a safety hazard.

(C) The open end should have no sharp edges and should not extend more than two inches (2") beyond the edge of the pool.

(D) The fill spout can be designed to be detachable and the plumbing plugged to prevent a trip hazard;

(2)(A) An automatic water fill control with a manual override may be provided to maintain the water level in the pool/spa at the proper level.

(B) The water supply must be protected at all times from backflow.

(C) An approved backflow preventer installation consists of a reduced pressure zone (RPZ) backflow preventer which:

(i) Has been accepted by the department and the State Board of Plumbing; and

(ii) Is installed where it is readily accessible for inspection and maintenance.

(D) The RPZ must be protected from freezing temperatures wherever installed – under buildings, inside buildings, or in an insulated box manufactured for

maintenance purposes for the RPZ – ample room is required for testing and/or maintenance.

(E) If installed out in the open, it shall be the responsibility of the plumbing contractor and/or the owner as the case may be, to provide proper freeze protection; or

(3)(A) A hose bibb equipped with vacuum breaker.

(B) If make-up water is added to the surge tank through the pool/spa recirculation piping or through a dedicated fill line which allows water to enter at the pool water level, then the installation must comply with the above requirements for backflow prevention.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-106. Sewage.

The sewer system for all pools/spas shall comply with the following:

(1) **Capacity.** The sewer system shall have sufficient capacity to serve the facility, including the:

- (A) Bathhouse;
- (B) Locker rooms;
- (C) Toilets; and
- (D) Related accommodations;

(2) **Connection.**

(A) There shall be no direct physical connection between the sewer system and any drain from the pool/spa or circulation system.

(B) Any pool/spa deck drain, backwash, or overflow from the circulation system, when discharged to the sewer system, storm drain, or other approved natural drainage course, shall be discharged through a suitable air gap so as to preclude the possibility of backflow of sewage or wastewater into the pool/spa or piping system; and

(3) **Individual sewage disposal systems.**

(A) The sanitary sewer servicing the pool and auxiliary facilities shall discharge to a public sewer system wherever possible and in accordance with applicable requirements.

(B) Where no such sewer is available, the connection shall be made to a suitable wastewater treatment system which has been designed and constructed and is operated and maintained in accordance with all the current Department of Health Rules Pertaining To Onsite Wastewater Systems, 14 CAR pt. 21.

(C) An on-site sewage disposal system permit shall be approved before pool construction can begin.

(D) Filter backwash and pool drainage shall not be discharged into an onsite sewage disposal system.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-107. Pool and pool area design/construction details.

(a) Location.

(1) An outdoor pool location shall be evaluated during the design phase to reduce exposure to excessive pollution by dust, smoke, leaves, or other potential sources of contamination.

(2) The pool/spa shall be located so that drainage from the surrounding area will not wash contamination into the pool/spa during rains.

(3) Gutters from buildings adjacent to the pool/spa area shall not discharge onto the pool deck.

(b) Material.

(1) General.

(A) Pools, spas, and related facilities shall be constructed of concrete or other approved material, with a white or light colored finish.

(B) Materials shall be:

(i) Inert;

(ii) Nontoxic to humans;

- (iii) Impervious;
- (iv) Permanent; and
- (v) Enduring.

(C) Materials must withstand the design stresses with an adequate factor of safety.

(D) Materials must provide a water-tight tank with a smooth and easy to clean surface or to which a smooth, easy to clean finish can be applied.

(2) Approved pool material.

(A) Approved pool materials include, but are not limited to:

- (i) Concrete;
- (ii) Stainless steel wall with concrete bottom; or
- (iii) Fiberglass wall with a concrete bottom.

(B) Concrete may be required behind the walls of fiberglass wall panel pools if the bracing system is determined to be inadequate for support.

(C) Vinyl on sand, earth, or material other than concrete shall not be permitted in:

- (i) Pools;
- (ii) Spas; or
- (iii) Water recreational attractions.

(D) Vinyl liners may be installed over existing approved construction materials as a method of repair.

(3) Approved spa materials.

(A) Approved spa materials include any of the approved pool materials or one-piece fiberglass or acrylic prefabricated units.

(B) Other materials will be evaluated on a case-by-case basis per 20 CAR § 136-124.

(4) **Safety ledges.** Safety ledges are not permitted in pools constructed after the effective date of this part or when the shell is remodeled after the effective date of this part.

(c) Shape, design, and slopes.

(1) **Swimming pools.**

(A)(i) Pools shall be designed and constructed of such shape and contour so that efficient and safe control of the pool and bathers can be accomplished.

(ii) The pool bottom shall have definite slopes to the outlet.

(B)(i) Minimum standard pool dimensions and slopes are defined in Figures 1, 2, 3, and Chart A in Appendix A.

(ii) The minimum dimensions on "No Diving" pools may be reduced if adequate justification is provided on a detailed site plan during the plan review process.

(iii) Whenever the size of the pool is reduced, the Department of Health may increase the turnover requirements to ensure adequate recirculation/filtration/and disinfection and specify certain safety requirements such as adequate "No Diving" signage.

(2) **Competition pools.** These shall meet the design standards of the appropriate accreditation association and/or this part as determined by the department.

(3) **Wading pools, spray pools, and spas.**

(A) The bottom shall slope not less than three inches (3") in ten feet (10') toward the drains, nor more than six inches (6") in ten feet (10') toward the drain or drains.

(B)(i) No obstructions such as excessively raised drains, steps, or concrete appurtenances on which children may fall or become injured shall be placed in the wading pool or spray pool area.

(ii) This does not preclude the installation of water features such as water spray devices.

(iii) Design features shall be reviewed during preliminary review with the department.

(4) **Water slides.**

(A)(i) The minimum plunge pool operating water depth at the slide flume terminus shall be three feet (3').

(ii) This depth shall be maintained for a minimum distance of ten feet (10') in front of the slide terminus from which point the plunge pool may have a

constant upward slope to allow a minimum water depth of two feet (2') at the base of the steps.

(iii) The floor slope shall not exceed one foot (1') in ten feet (10').

(iv) The slide flume shall terminate at, or six inches (6") below, normal water operating level.

(v) The slide flume shall be perpendicular to the plunge pool wall for a minimum length of ten feet (10') at the exit end of the flume or flumes.

(vi) The minimum distance between any plunge poolside wall and the outer edge of any slide flume terminus shall be four feet (4').

(B) All sections of the flume shall be properly formed and sealed together so as to prevent possible abrasions or injuries.

(5) Water recreation attractions, special purpose pools, controlled, limited use spas, therapy pools/spas.

(A) Special consultation with the department is necessary in order that consideration can be given to concepts of design variations and to areas where potential problems may exist.

(B) Therefore, prior to preparation and submission of engineering plans and specifications, the design engineer shall consult with the department to ensure the department has a complete understanding and agrees to the design concepts of the project.

(C) Preliminary design plans shall be submitted for review.

(d) Walk areas — Pool deck.

(1) General.

(A) Walk areas shall extend entirely around the perimeter of the pool.

(B) Walks shall be constructed of concrete or other approved material and kept in good repair.

(C) The walks shall be adequately drained by sloping at least one-fourth inch (1/4") per foot away from the pool.

(D) New products used on or as pool decks shall be reviewed per 20 CAR § 136-124.

(2) **Deck drains.**

(A) Deck drains must be installed where necessary to prevent standing water on the deck.

(B) All deck drainage must be "to waste" and not be filtered or returned to the pool.

(C) The deck drain grates shall be removable to facilitate the cleaning of the drains.

(3) **Use of carpet.** The use of carpet on indoor or outdoor pool/spa facilities is prohibited.

(4) **Minimum deck widths.**

(A) Poolside tables and chairs or other equipment should not obstruct the deck areas.

(B) The minimum widths for each type of pool are listed.

Pool Type	Walk Area Requirement
Outdoor pool	8 feet
Indoor pool	4 feet
Pool with diving board – water surface of 3,000 sq. ft. or less	4 feet behind board
Pool with diving board – water surface greater than 3000 square feet	8 feet behind board
Wading Pool or Spray pool	4 feet
Water Slide	4 feet except at exit side where the walk shall be a minimum of 10 feet

Spa	4 feet around 50% of the spa
Water Recreation Attractions	As determined by the department
Special Purpose Pools	As determined by the department

(e) **Head room.** There shall be a minimum of thirteen feet (13') of unobstructed head room above the level of the diving board.

(f) **Ventilation.**

(1) All indoor pool/spa enclosures must be properly ventilated to prevent the accumulation of moisture.

(2) Ventilation shall meet the requirements of the current Arkansas State Mechanical Code, 17 CAR pt. 260.

(g) **Lighting.**

(1) **Area lighting.** The following requirements shall be met whenever the pool is in operation:

(A) Area lighting shall be provided at all pools/spas;

(B) A minimum of five (5) foot-candles per square foot of pool area shall be provided.

(C) Where underwater lighting is not used the area lighting shall provide not less than ten (10) foot-candles per square foot of pool area.

(D) When the pool is not in operation, security lighting is recommended.

(2) **Arrangement.**

(A) The arrangement and design of the area lighting shall be such that personnel may clearly observe every part of the:

(i) Pool;

(ii) Diving boards; and

(iii) Other walk areas.

(B) Lights shall be so installed as to create no hazards to bathers.

(3) **Underwater lights.** Where underwater lights are used, not less than five-tenths (0.5) watts per square foot of pool water surface area shall be provided.

(h) **Hose connections.** Sufficient hose connections of adequate size and water pressure and equipped with vacuum breakers shall be provided for cleaning all of the pool area.

(i) **Steps, benches, and ladders.**

(1) **General.**

(A) Steps, benches, and ladders shall be of an impervious material and of such design that they can be easily cleaned.

(B) They shall be so designed and constructed that no water is left on them when the water level in the pool is lower than the steps.

(C) The steps must have a nonskid surface.

(D) Permanent black or dark colored edge stripes or tiles must mark the steps.

(E) Handrails shall be provided for all steps.

(F) When figure 4 type handrails are used for spa steps, they may be mounted to the deck.

(G) The ladders must be readily removable.

(H) All pool benches or other underwater design features must be clearly marked on the vertical and horizontal faces or edges.

(2) **Placement and minimum number.**

(A) One (1) ladder shall be provided for each seventy-five feet (75') of pool perimeter.

(B) On "No Diving" pools, with a maximum depth of five and one-half feet (5 1/2'), one (1) ladder may be deleted provided that steps with handrails are installed in the shallow end of the pool or if the pool has zero depth entry.

(C) Pools with diving boards or wells shall have two (2) ladders placed in the diving end.

(j) **Sand beaches or landscape area in pool enclosures.**

(1) **Limited access.**

(A) Sand beaches or landscape areas shall not be located inside of the pool enclosure unless an approved barrier to prevent access on the part of the bathers is provided.

(B) If access is allowed to such areas, satisfactory facilities shall be provided for the proper cleansing of bathers before they again enter the bathing areas.

(C) This may include the installation of foot showers.

(2) **Preliminary design review.** Design of these facilities shall be submitted in the preliminary stages for consultation with the department in order that consideration can be given to areas where potential maintenance or safety problems may exist.

(k) **Foot baths.**

(1) The use of footbaths is prohibited.

(2) This does not preclude the use of foot showers, provided the area is well drained away from the pool.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-108. Recirculation systems and equipment.

(a) **General.**

(1) All pools, spas, or other related facilities shall be equipped with a circulation system consisting of at least:

(A) A pump or pumps;

(B) A hair and lint strainer or strainers;

(C) Piping;

(D) A filter or filters;

(E) Water treatment and disinfecting equipment; and

(F) Other accessory equipment.

(2) All system components shall:

(A) Meet the latest requirements of Standard 50 of the National Sanitation Foundation; and

(B) Bear their seal of approval.

(3) Pumps larger than those reviewed by NSF Testing Standards or Underwriters Laboratory (UL) shall be considered on a case-by-case basis.

(b) **Turnover.**

(1) The capacity of the circulation system, when operating at the maximum allowable head loss on the filters, shall be sufficient to recirculate and disinfect the entire volume of the pool, spa, or other facility water as follows:

Swimming/Competition Pool	Existing Construction: 8 hours (pools built prior to 2003) New Construction: 6 hours (see 20 CAR § 136-110(b)(1))
Wading Pool	2 hours
Water Slide or Therapy Pool	2 hours
Spa	30 minutes

(2) Turnover rate for other water recreation attractions or special purpose pools shall be determined by the Department of Health during the design review process.

(c) **Separation.**

(1) Wading pool or spa water shall not be interconnected with any other pool and all wading pools/spas shall have a separate recirculating system consisting of a filter, pump, piping, and disinfection equipment.

(2) Where multiple pools are designed with common recirculation equipment, i.e., water recreation attractions, the minimum turnover rate for the pools shall be determined during the preliminary review process.

(d) **Therapy or jet systems.** The return lines of spa jet or spa/therapy systems shall be independent of the recirculation-filtration and heating system.

(e) **Pumping equipment.**

(1) **Capacity.**

(A)(i) A pump or pumps shall be provided with adequate capacity for the required number of turnovers of swimming pool/spa water as specified in 20 CAR § 136-108(b), and whenever possible shall be so located as to eliminate the need for priming.

(ii) If the pump or suction piping is located above the overflow level of the pool/spa, the pump shall be self-priming.

(B)(i) The pump shall be capable of providing a flow adequate for backwashing filters.

(ii) Under normal conditions, the pump or pumps shall supply the required circulation rate of flow to obtain the turnover rate required at a total dynamic head of at least:

(a) Forty-five feet (45') for all vacuum filters;

(b) Forty feet (40') for pressure type sand filters;

(c) Fifty feet (50') for pressure type DE or cartridge filters;

(d) Forty feet (40') total head for vacuum type DE filters with twenty inches (20") of vacuum on the suction side.

(iii) **Note.** When the recirculation equipment is installed below pool level, these head rates may be increased.

(2) **Pump strainer.**

(A) The circulation system shall include a strainer installed on the suction side of the pump to prevent hair, lint, and other debris from reaching the pump.

(B) Strainers shall:

(i) Be corrosion resistant with openings not more than one-fourth inch (1/4") in size;

(ii) Provide a free flow area at least four (4) times the cross-section area of the pump station line; and

(iii) Be readily accessible for cleaning.

(C) A spare strainer basket should be provided.

(f) **Piping system.**

(1)(A) Piping shall be:

(i) Constructed of nontoxic material;

(ii) Able to withstand the maximum internal and external operating temperatures; and

(iii) Designed to minimize friction loss.

(B) All plastic pipe used shall be:

(i) NSF-approved; and

(ii) Schedule 40 or greater.

(C) All valves and piping shall be appropriately labeled and identified as to its purpose.

(2) Pool piping shall be supported to preclude possible settlement, which would provide either dirt traps or air pockets.

(3)(A) The flow velocity in the pressure piping shall not exceed ten feet (10') per second.

(B) The flow velocity in suction piping shall not exceed six feet (6') per second.

(4) Design calculations shall be required for projects greater than three thousand square feet (3,000 sq. ft.) of water surface.

(g) **Clean-outs.** Clean-outs should be provided at such points in the recirculation system so as to allow obstructions and/or accumulations to be readily removed.

(h) **Main drains.**

(1) **General.**

(A) All facilities shall be provided with a main outlet at the deepest point to permit the facility to be completely and easily drained.

(B) Openings must be covered by proper grating.

(2) **Main drain flow rate.** The main drain or drains shall be designed for a flow rate based on a minimum thirty percent (30%) of the total flow in gpm, not to exceed the maximum allowable filtration rate and shall not exceed the drain cover flow rating.

(3) Hydrostatic relief valves.

(A) Each main drain shall be equipped with a hydrostatic relief valve except for spas/pools installed above ground level or if the spa/pool contains sidewall main drains.

(B) A sump pump or other approved method of removing ground water from under the pool shell shall be required on any below grade spa/pool that has sidewall main drains.

(4) Spa suction fitting.

(A) On a spa, the main drain outlets shall be designed with dual suction fittings which have equal pipe diameter sizes.

(B) The system shall be designed so that neither of the main drain outlets can be cut out of the suction line by a valve or other means.

(C) The jet system for spas shall be equipped with two (2) suction fittings of approved antientrapment design.

(5) Safety.

(A) The combined areas of the openings of the grating shall:

(i) Be at least four (4) times the area of the main outlet pipe; and

(ii) Have sufficient area so that the maximum velocity of the water passing through the grate does not exceed one and one-half feet (1 1/2') per second at maximum flow.

(B) The maximum width of grate openings shall be one-fourth inch (1/4").

(C) Pools with a single main drain not meeting the above design shall have an antientrapment type cover.

(D) Dual main drains shall be required on all new construction or renovation of pool main drain plumbing.

(E) The dual main drains must have a minimum three-foot distance from center to center from each other.

(F) All pool/spa outlet main drain grates, antientrapment covers, and inlet fittings shall have tamper-proof screws that cannot be removed except with tools.

(i) Inlets.

(1) **General.**

(A) Pool inlets shall be submerged and be located not less than six inches (6") or more than eighteen inches (18") below normal operating water level.

(B) Pool inlets shall be installed on a maximum of fifteen-foot centers to:

(i) Produce a circulation of water throughout the pool without the existence of dead spots; and

(ii) Carry pool-bottom deposits to the outlets.

(C) Provisions shall be made for adjusting the volume of flow through each inlet.

(2) **Directional inlets.** Wall inlets shall be capable of adjusting the direction of flow and of producing sufficient velocity to impart a substantial circulatory movement to the pool water.

(3) **Recessed stair inlets.** At least one (1) inlet shall be located in each recessed stairwell or other space where water circulation might be impaired.

(4) **Floor inlets.**

(A) If inlets are to be placed on the bottom of the pool, the number of inlets shall be determined by dividing the perimeter of the pool (measured in feet), by fifteen (15).

(B) Any fraction thereof would require one (1) additional inlet.

(C) Floor inlets shall be so designed as to not create a hazard.

(5) **Special requirements.** Inlet requirements for special designs such as zero-depth entry pools shall be evaluated on a case-by-case basis.

(6) **Wading pools and spas.**

(A) Inlet requirements for wading pools and spas designed for six (6) or fewer bathers shall be one (1) for every fifty square feet (50 sq. ft.) of water surface.

(B) Any additional fraction thereof would require one (1) additional inlet.

(j) **Rate-of-flow indicators.**

(1) **General.**

(A) All pools and other related facilities shall be provided with an operational rate-of-flow indicator that reads in gallons per minute (gpm).

(B) All rate-of-flow indicators shall be installed so as to meet manufacturers' installation requirements, such as upstream and downstream straight pipe lengths.

(C) Where the rate-of-flow indicator is installed between the pump and the filter, periodic cleaning shall be performed to ensure accurate readings.

(2) Backwash flow indicator.

(A) Where the piping arrangement is sufficient to meet the manufacturer's requirements for pipe lengths, a rate-of-flow indicator on the pump discharge, between the pump and filter or filters will be provided on pools with filters that require backwashing.

(B) The operator shall be responsible for ensuring that the rate-of-flow indicator is functioning properly.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-109. Overflow systems.

(a) General.

(1) **Overflow system required.** All pools/spas shall be provided with a surface overflow system which shall:

(A) Be an integral part of the circulation system; and

(B) Consist of either:

(i) Built-in-place gutters;

(ii) Prefabricated gutters; and/or

(iii) Recessed automatic surface skimmers.

(2) Combination gutter/skimmer system.

(A) Nothing in this section shall preclude use of a surface overflow system which combines both a gutter and a recessed automatic surface skimmer.

(B) All pools with a water surface greater three thousand square feet (3,000 sq. ft.) shall be equipped with gutters or a combination of gutters and skimmers.

(b) **Perimeter overflow (gutters).** Whenever a built-in-place perimeter overflow system or a prefabricated perimeter overflow system is provided, it shall be designed and installed such that:

(1) **Capacity.** The system shall be capable of handling one hundred percent (100%) of the circulation flow (based upon the required turnover rate) without the overflow troughs being flooded for any appreciable period of time;

(2) **Surge capacity.**

(A) A surge capacity shall be provided either in the system and/or by use of a surge tank.

(B) The total surge capacity shall be at least equal to one gallon per square foot (1 gal./sq. ft.) of swimming pool water surface area;

(3) **Water level.** The water level of the swimming pool/spa shall be maintained at or slightly higher than the level of the overflow rim of the perimeter overflows, except for the time needed to transfer all of the water which may be in surge capacity back into the swimming pool after a period of use, provided that this transfer time shall not be greater than twenty (20) minutes.

(4) **Overflow gutters.**

(A) Gutters shall:

(i) Extend entirely around the perimeter of the pool and have the necessary slope to prevent accumulations of debris, dirt, etc.;

(ii) Be of ample size to carry off normal amounts of water introduced into them; and

(iii) Be easily accessible for cleaning.

(B) Drainage outlets shall be:

(i) Provided at least every fifteen feet (15'); and

(ii) Covered by removable grating.

(5) **Overflow rim.** When installed, the tolerance of the overflow rim shall not exceed one-fourth inch (1/4") as measured between the highest point and the lowest point of the overflow rim.

(6) **Automatic skimming.** During nonuse, the overflow system shall be capable of providing continuous and automatic skimming action to the water at the surface of pool.

(7) **Overflow troughs.**

(A) The overflow troughs shall be installed completely around the perimeter of the swimming pool, except at:

- (i) Steps;
- (ii) Recessed ladders; and
- (iii) Stairs.

(B) **Hand hold.** The exposed surfaces of the overflow trough shall be capable of providing a firm and safe handhold.

(C) **Easily cleaned.** The overflow trough shall be:

- (i) Capable of being cleaned easily; and
- (ii) Of such configuration as to minimize accidental injury and provide for adequate water depth marking.

(c) **Recessed automatic surface skimmers.**

(1) **NSF approval required.** Whenever a recessed automatic surface skimmer is installed it shall be designed and constructed in accordance with the current NSF standards pertaining to recessed automatic surface skimmers.

(2) **Skimmer design material.** The recessed skimmer shall be of a grade designed for commercial pools, be of substantial, durable, reasonably corrosion-resistant material and equipped with an automatic skimmer weir and removable strainer basket and flat lid flush with deck and securely attached at all times.

(3) **Skimmer flow rate.** The skimmer shall be designed for a flow rate based on a minimum seventy percent (70%) of the total flow, in gpm.

(4) **Skimmer flow adjustment valve.** All skimmers shall have an integral trimmer valve.

(5) **Skimmer minimum required.**

	Quantity	Minimum Number
Swimming Pool	1 per 500 sq. ft.	4*
Wading Pool	1 per 500 sq. ft.	1
Water Slide	1 per 500 sq. ft.	2 Skimmers – Plunge Pool; 1 Skimmer – Pump Reservoir
Therapy Pool/Swim Spas/Spas	1 per 500 sq. ft.	1

(A) Skimmer quantity for other water recreation attractions or special purpose pools shall be as determined by the Department of Health during the design review process.

(B) **Note.** Minimum number of skimmers may be reduced as determined by the department.

(6) **Skimmer location.** On outdoor pools/spas the recessed automatic surface skimmer or skimmers shall be so located as to take into consideration the direction of prevailing winds.

(7) **Skimmer recessed.** A recessed automatic skimmer shall not protrude into the pool.

(8)(A) **Skimmer weir.** The weir in the skimmer shall adjust automatically and operate freely to variations in water level over a minimum range flow of four inches (4”).

(B) The floating basket design is approved in lieu of weirs.

(9) **Equalizer.** Equalizer piping for skimmers is not allowed.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-110. Filtration systems and equipment.

(a) **General.**

(1) **Filter required.**

(A) All pools/spas shall be equipped with a filtration system for the purpose of clarifying the water.

(B) The filtration system shall be an integral part of the circulation system and shall consist of:

- (i) Sand-type filters;
- (ii) DE type filters; or
- (iii) Cartridge filters.

(2) **Design.**

(A) All filter units shall be designed and constructed in accordance with applicable NSF/ANSI standards pertaining to swimming pool/spa filters.

(B) The filter system shall be designed and installed with all the necessary valves and piping which may be needed to isolate, backwash, or drain an individual filter unit for maintenance and/or repair.

(3) **System capacity.** The filtration system shall have the capacity to meet the flow rate required for the prescribed number of turnovers without exceeding the maximum allowable filtration rate.

(4) **Rate of flow control.** All filter installations shall be equipped with a rate of flow control valve (ball, gate, and other control valve types) on the discharge side of the pump.

(5) **Accessibility.** All filters shall be designed and installed so as to provide easy accessibility for:

- (i) Cleaning;
- (ii) Operating;
- (iii) Maintaining; and
- (iv) Servicing.

(6)(A) **Gauges.** Filters shall be equipped with an approved pressure gauge or gauges.

(B) Vacuum filters shall be equipped with a vacuum gauge or gauges.

(7) **Drainage.** All filters shall be designed and installed with all the valves and piping needed to drain the filters completely for servicing or winterizing.

(8) **Bypass.** Provisions shall be made to bypass the filter and empty the pool water to waste.

(9) **Air relief.**

(A) All pressure filters shall be designed and installed with an air relief valve or valves which shall be located at or near the high point of the filters and be capable of being operated manually.

(B) Automatic air-relief valves on top of the filters with manual air-relief capabilities are acceptable.

(10) **Filter backwash.**

(A) Backwash from the filter or filters shall be piped to a sanitary sewer or other disposal method approved by the Department of Health.

(B) If required, a permit for the discharge shall be obtained from the Division of Environmental Quality.

(C) In all cases of filter backwash discharge, an air-gap shall be provided with a minimum of six inches (6") between the discharge pipe and top of the sump or sewer piping.

(D) Both the sump and the exit pipe shall be sized to accommodate the backwash flow.

(E) A sight glass or other means for viewing the clarity of the backwash shall be provided.

(F) A provision to filter to waste shall be provided.

(b) **Sand filters.**

(1) **General.**

(A) When a sand-type filter or filters is installed, it may be either a gravity, or a pressure, or a vacuum sand-type filter.

(B) Options include:

(i) Rapid-rate sand-type filter, which shall be designed for filtration rates not in excess of three gallons per minute per square foot (3 gpm/sq. ft.) of sand bed area; or

(ii) High rate sand-type filter, which shall be designed with filtration rates not in excess of:

(a) Seven and five-tenths gallons per minute per square foot (7.5 gpm/sq. ft.) of sand bed area on existing pools using an eight-hour turnover rate; or

(b) Fifteen gallons per minute per square foot (15 gpm/sq. ft.) of sand bed area on newly constructed pools using a six-hour turnover rate.

(C)(i) All other pool/spas may utilize the fifteen gallons per minute per square foot (15gpm/sq. ft.) of sand bed area rate.

(ii) See 20 CAR § 136-108(b) for turnover rates.

(2) Single filter flow control.

(A) If a single filter unit is provided on pools designed and constructed prior to December 2003, the pump shall be sized at fifteen gallons per minute per square foot (15 gpm/sq. ft.) of filter area to provide the necessary backwash flows.

(B) A valve to control flow shall be provided to limit the normal filtration rate to seven and five-tenths gallons per minute per square foot (7.5 gpm/sq. ft.) of filter area.

(C) Flow control valves shall be required on existing facilities utilizing single sand filters on a seven and five-tenths gallons per minute per square foot (7.5 gpm/sq. ft.) rate.

(D) Any filter renovation of pools prior to 2003 will require preliminary review to determine existing piping size and design considerations.

(3) Multiple filters. If two (2) or more filters are used to achieve the required filter area, they must be of the same size.

(4) Inspection port. Internal components of the filter shall be accessible through an inspection port as required by NSF.

(5) **Backwash.** When a sand-type filter is installed it shall be designed and installed such that it may be backwashed at a rate of no less than fifteen gallons per minute per square foot (15 gpm/sq. ft.) of filter bed area.

(6) **Filter media.**

(A) Filter sand shall be hard filter silicon material free of carbonates or other foreign material, with:

(i) An effective particle size of between four tenths millimeters (0.4 mm) and fifty-five hundredths millimeters (.55 mm); and

(ii) A uniformity coefficient not exceeding one and seventy-five hundredths (1.75).

(B) Depth of filter sand shall be adequate for the function intended.

(C) In no case shall it be less than:

(i) Twenty inches (20") for rapid-type filters; and

(ii) Twelve inches (12") for high-rate type filters.

(7) **Freeboard.** A freeboard between the top of the filter media and the lowest draw off point of the upper distribution system shall be provided and be of sufficient height so no media is lost during backwash.

(c) **Diatomaceous earth filters.**

(1) **Filter type.**

(A) When a DE type filter is installed, it may be:

(i) Either a pressure or a vacuum type; and

(ii) Designed to operate either with or without continuous slurry feed.

(B) A DE filter with a continuous slurry feed shall be used for filtration rates not in excess of two and five-tenths gallons per minute per square foot (2.5 gpm/sq. ft.) area.

(C) A DE filter which operates without continuous slurry feed shall be used for filtration rates not in excess of two gallons per minute per square foot (2 gpm/sq. ft.) of filter area.

(2) **Cleaning.**

(A) When a DE filter is installed it shall be designed and installed with provisions for cleaning by one (1) or more of the following methods:

- (i) Backwashing;
- (ii) Spray wash (either mechanical or manual); and
- (iii) Agitation.

(B) The water used in cleaning a DE filter shall be discharged to waste or other approved means.

(3) Precoat.

(A) Precoating of the septa shall be in accordance with manufacturer's recommendations to ensure adequate coating of DE prior to filtering water through the system.

(B) A precoat pot may be installed on the suction side of the pump to ensure adequate coating of the filter septa.

(C) No additional precoat equipment is needed on vacuum systems since the DE can be placed directly in the filter tank.

(4) **Filter piping.** The system piping shall be such that during precoat procedures the filtered effluent shall be refiltered or wasted without passing into the pool until the effluent is clear of suspended matter.

(5) **DE substitutes.** Synthetic substitutes such as cellulose products manufactured as DE replacements may be utilized.

(d) Cartridge filters.

(1) General.

(A) Cartridge type filters are permitted for use on Class E spas or Class F spas.

(B) Approval of cartridge filters for use on all other classes of pools shall be on a case-by-case basis.

(2) Number.

(A) One (1) extra complete set of cartridges per filter shall be kept on the premises at all times.

(B) Replacement of cartridge elements shall be done whenever the requirements of 20 CAR § 136-105(b) cannot be maintained.

(3) **Cleaning.** Cartridge filters must be cleaned by soaking in an approved cleaning solution and/or by pressure spraying.

(4) **Filter rate.** Cartridge filters must filter at a rate not in excess of three hundred seventy-five thousandths gallons per minute per square foot (.375 gpm/sq. ft.).

(e) **Other filters.** Any filters other than those described above must be approved by the NSF and the department as set forth in 20 CAR § 136-124 before they can be considered for use in the recirculation system for public swimming pools/spas.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-111. Disinfection equipment.

(a) General.

(1) Every pool/spa shall be equipped with a disinfectant feeder or feeders as required to maintain the microbiological, chemical, and physical characteristics of the pool/spa water within the required limits as listed in Appendix B.

(2) The disinfectant shall provide a residual in the pool/spa water so that it can be monitored.

(b) Types of feeders.

(1) Disinfectant feeders for use on public pools and spas may be the hypochlorinator type that feeds as a liquid by positive displacement or by a feeder that uses controlled erosion or dissolving of a chemical by the flow through process.

(2) Feeders shall maintain a dosage proportional to the flow.

(3) Because of serious safety considerations the use of gas chlorine is not recommended and may not be approved.

(4) When used, the operation must be in compliance with all state and federal safety requirements.

(c) **Disinfectants other than chlorine or bromine.** Disinfectants other than chlorine or bromine require special approval and are not to be used without prior written permission from the Department of Health.

(d) **Approval of disinfectant feeders and chemical feeders.** All disinfectant feeders and all chemical feeders which are installed on pools/spas shall be designed and constructed in accordance with applicable NSF or UL standards pertaining to disinfectant and chemical feeding equipment for use on swimming pools and spas.

(e) **Alternate disinfection devices.** Any disinfection device such as chlorine generators (salt systems), ultraviolet light, ozonators, copper/silver ionizers, etc. must be reviewed and approved for use per 20 CAR § 136-124.

(f) **Feed rate.**

(1) Disinfection feeders shall have the capacity to feed five parts per million (5 ppm) to the twenty-four-hour recirculation flow of the filtration system.

(2) All other disinfectants shall feed at rates as determined by the department.

(g) **Minimum standards for gas chlorine feeders on existing pools.**

(1) **Design.** Feeders shall be of such design and construction as will:

(A) Withstand:

(i) Wear;

(ii) Corrosion or attack by chlorine gas;

(iii) Chlorine vapors; or

(iv) Chlorine solutions; and

(B) Not be adversely affected by repeated regular adjustments or other conditions anticipated in the normal use of the device.

(2) **Easily cleanable.** Feeders shall be capable of being easily disassembled for cleaning and maintenance and being easily reassembled.

(3) **Nonclog design.** Feeders shall be of such design and construction as to preclude stoppage from materials which may be contained in the compressed gas.

(4) **Fail safe.** Feeders shall incorporate failure-proof features so that the chlorine gas cannot feed directly into the swimming pool, the pool piping system, water

supply system, or the swimming pool enclosure under any type of failure or interruption of operation of the equipment.

(5) **Solution feed type.** Feeders shall be a solution feed type, capable of delivering a chlorine solution at its maximum rate without releasing chlorine gas into the atmosphere.

(6) **Accidental failure.** Feeders shall be of such design so that during accidental failure or interruptions of water supply to the chlorinator, any leaking gas will be safely conducted to the outdoors, not onto the pool deck or any populated area.

(7) **Chlorine compartment.**

(A)(i) Where gaseous chlorine equipment is provided, the mechanical proportioning device and cylinders of chlorine shall be housed in a reasonably gas tight, corrosion-resistant, and mechanically vented enclosure with a shatter-proof gas tight inspection window.

(ii) Venting shall:

(a) Be to atmosphere in an unrestricted area; and

(b) Have a motor-driven exhaust fan capable of producing at least one (1) air exchange per minute.

(iii) Properly designed automatic louvers are required near the top of the enclosure for admitting fresh air.

(iv) Electrical switches for the control of artificial lighting and ventilation shall be on the outside of the enclosure adjacent to the door.

(B)(i) The floor area of the enclosure shall be of adequate size to house the chlorinator, fan, scales, and one (1) extra chlorine cylinder.

(ii) Cylinders must be anchored to provide proper storage.

(iii) Ammonia stored outside the chlorine room must be available to detect any possible chlorine leaks.

(8) **SCBA required.** A self-contained breathing apparatus (SCBA) shall be provided and shall be readily accessible in a secured location outside the chlorine room.

(h) **Hypochlorinators and chemical feeders.**

(1) **Positive feed required.** Feed shall be positive and constant under all conditions of pressure in the circulating system.

(2) **Back flow prevention.** Positive features to prevent back-flow from the circulation system to the solution container shall be provided.

(i) **Flow through or controlled erosion feeders.**

(1) Flow through or controlled erosion feeders shall be used in conjunction with a chemical feeder to maintain pH when used for feeding a hypochlorite nonstabilized compound.

(2) The feeder shall have an adjustable rate of flow through the feeder.

(3) The feeder shall have a positive flow indicator.

(4) The feeder shall be so constructed and installed so that no chemical shall be fed when the circulating system has been shut down.

(j) **Chemical training.**

(1) Any facility utilizing chlorine gas shall be required to have operators complete a certified training course which should include topics such as:

(A) Handling;

(B) Storage; and

(C) Hazard response and planning.

(2) Similar training is also recommended for facilities utilizing sodium hypochlorite.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-112. Chemical feeders.

(a) **General.**

(1) A chemical feeder must be used in conjunction with a hypochlorinator feeding nonstabilized chlorine or gas chlorinators in order to maintain pH of pool/spa water.

(2) It shall be a positive displacement type feeder.

(b) **Feed rate.**

(1) Equipment shall:

(A) Be sufficient to supply at least two pounds (2 lbs.) of soda ash per fifteen thousand gallons (15,000 gals.) of pool/spa water per twenty-four-hour period; and

(B) Have a minimum feed capacity of two and one-half gallons (2 1/2 gals.) per hour.

(2) This same type feeder can also be used to feed acid and granular chlorine for super-chlorination

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-113. Pool/spa heaters.

All gas-fired heaters for pools or spas shall meet the requirements of the current Fuel Gas Code, 17 CAR pt. 67.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-114. Controlled limited use spas.

(a) Controlled limited use spas as defined in 20 CAR § 136-102 shall meet all the applicable requirements of this part with the following variances:

(1)(A) A minimum of fifty square feet (50 sq. ft.) of NSF-approved cartridge filter for units five hundred gallons (500 gals.) or less.

(B) The filtration may be located below the skimmer unit or within an equipment system.

(C) Larger units shall be evaluated on a case-by-case basis;

(2)(A) An NSF-approved continuous disinfection (chlorine or bromine) unit shall be required.

(B) Other similar dispensing devices maybe approved on a case-by-case basis.

(C) Location of facility, patron use, and supervision shall be considered when determining equipment need.

(D) The unit shall be sized in accordance with 20 CAR § 136-111(e);

(3) One (1) skimmer with weir and a minimum of two-side/bottom suction fittings with antientrapment covers shall be provided per pump;

(4)(A) An alternate disinfection unit (i.e., ozonator, UV, etc.) is recommended and only in conjunction with an approved primary disinfection unit.

(B) If installed it shall be installed per manufacturers' requirements; and

(5) All safety and signage requirements for spas shall be met.

(b) **Note.** The recirculation/filtration/disinfection system shall operate twenty-four (24) hours continuously.

Authority. Arkansas Code § 20-30-103.

Codification Notes. "UV" means ultraviolet.

20 CAR § 136-115. Testing equipment.

(a) All pools/spas shall have a functional and accurate test kit or equipment for measuring free and combined chlorine or bromine concentration, pH, total alkalinity, and cyanuric acid (if stabilizer is used in pool/spa water).

(b)(1) Other test kits may be required when deemed necessary by the Department of Health.

(2) The use of orthotolodine (OTO) tests for chlorine is prohibited. N, N-diethyl-p-phenylenediamine (DPD) test kits shall be provided and capable of measuring the minimum and maximum allowable ranges for chemical operational parameters in Appendix B.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-116. Pool cleaning equipment.

Suction cleaner or cleaning equipment.

(1) **General.** Equipment shall be provided to remove sediment, sludge, and other accumulations from all areas of the pool/spa bottom and walls.

(2) **Minimum requirements.** The minimum equipment required for pool/spa cleaning includes one (1):

- (A) Vacuum head and hose or portable vacuum;
- (B) Wall brush suitable for use on pool/spa material;
- (C) Leaf net; and
- (D) Telescoping pole.

(3) **Use of common cleaning equipment.**

(A) Multiple facility operations may use common cleaning equipment.

(B) To prevent cross contamination, caution must be taken to clean and disinfect vacuum equipment following fecal accidents or suspected waterborne disease outbreaks.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-117. Equipment rooms.

(a) **Access to equipment.**

(1) The equipment room shall be evaluated during the plan review process to determine if adequate space is provided for equipment to be serviced.

(2) Filters and other equipment shall be easily accessible for service.

(3) Equipment shall be safeguarded to prevent unauthorized tampering.

(4) The equipment room shall be adequately drained and ventilated.

(5) The room or rooms and equipment shall be maintained clean and in good repair.

(b) **Gas chlorine storage.** Where gas chlorine is used on existing facilities, the chlorine room shall meet the minimum standards as described in 20 CAR § 136-111(g)(7).

(c) **Ventilation for equipment rooms.**

(1)(A) Where the equipment room is provided below grade, stairway access and suitable drainage shall be provided.

(B) Enclosed stairways shall have louvered vents on three (3) sides of the room and an exhaust fan.

(2)(A) All other equipment and chemical storage rooms shall be ventilated through a louvered door and an opening, louvered vent on at least one (1) other side.

(B) In order to achieve adequate ventilation, an exhaust fan may be necessary.

(C) Chemical rooms must be vented away from the walk area.

(d) **Chemical storage.**

(1) Adequate space shall be provided for off-floor storage of chemicals, separate from the operating equipment.

(2) In rooms or areas with fixed ceilings, the minimum height shall be six and five-tenths feet (6.5').

(e) **Lighting.** All equipment and chemical storage rooms shall be equipped with at least one watt (1 W) of artificial light per square foot of floor area with a minimum of one hundred watts (100 W) provided.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-118. Bather preparation facilities.

(a) **General.**

(1) All Class A pools and spas open to the general public shall provide adequate bather preparation facilities.

(2) Whenever any pool other than Class A pools are opened to the general public, a minimum of one (1) restroom and shower facility for each gender shall be provided.

(3) Pools not open to the general public shall provide bather preparation facilities whenever suitable facilities are not available within a reasonable distance of the pool.

(4) In these instances the Department of Health shall determine reasonable distance.

(5) Lavatories, showers, and water closets shall be provided for each gender based on the maximum bather load as listed below or as required by the current Arkansas State Plumbing Code, whichever is most stringent.

(6) Certain pools having a high rate of swimmer change out, such as a school's pool used for classes, may be required to provide additional facilities.

FIXTURE	MEN	WOMEN
Lavatories	1 per 100	2 per 100
Water Closets	1 per 100	2 per 100
Urinals	1 per 100	
Showers	1 per 40	1 per 40

(b) Dressing rooms.

(1) A dressing room shall be provided for each gender.

(2) The dressing rooms shall be satisfactorily:

(A) Located;

(B) Constructed;

(C) Equipped;

(D) Lighted; and

(E) Ventilated.

(3) Floor finish shall be nonskid cement, tile, or other impervious material.

(4) Indoor-outdoor carpet is not approved.

(5) Nonskid mats may be installed but shall be removable for cleaning.

(6) Walls and partitions shall be constructed of smooth, impervious material.

(c) Light and ventilation.

(1) All bather preparation areas shall be adequately ventilated and lighted.

(2) A minimum of one watt (1 W) of light for each square foot of floor area is recommended.

(d) Hot and cold running water shall be provided.

(1) Dispensers for providing either liquid or powdered soap shall be provided for lavatories and showers.

(2) Adequate hand drying facilities, either single service paper towels or blower type hand dryers, must be provided.

(e) **Maintenance.** All bather preparation facilities shall be maintained in a clean condition and in good repair.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-119. Safety.

(a) Operation and management.

(1)(A) The pool or other related facility shall be maintained under the supervision and direction of a properly trained operator on staff, or on call, who shall be responsible for:

- (i) Promoting good sanitation and safety;
- (ii) The proper maintenance of the facility; and
- (iii) All physical and mechanical equipment and records.

(B) It is recommended that the operator shall have successfully completed a swimming pool operator course and have current certification recognized by the Department of Health.

(2) Recommended courses include:

(A) National Swimming Pool Foundation Certified Pool Operator (CPO) course;

(B) Association of Pool and Spa Professionals (APSP) pool certification courses;

(C) National Recreation and Park Association (NRPA) pool certification courses; and

(D) Other courses or curriculum (evaluated on a case-by-case basis) which provide technical training in pool/spa:

- (i) Water chemistry;
- (ii) Maintenance; and
- (iii) Safety.

(b) Lifeguards.

(1) **Lifeguards.** Lifeguards shall be present in accordance with the following:
All Class A pools and any pool that is opened to the general public.

(2) Number of lifeguards.

(A) A minimum of one (1) lifeguard shall be provided for each two thousand square feet (2,000 sq. ft.) of water surface.

(B) One (1) additional lifeguard shall be provided for each additional two thousand square feet (2,000 sq. ft.) of water surface, or fraction thereof equal to or greater than one thousand square feet (1,000 sq. ft.).

(3) Lifeguard chairs.

(A) One (1) lifeguard chair shall be provided for each lifeguard as required by this part.

(B) The lifeguard chair or chairs shall be elevated and strategically located to provide adequate coverage of all areas of the pool.

(C) This does not preclude the use of a lifeguard to walk the pool area or be stationed in the shallow areas of the pool.

(c) General safety.

(1)(A) No broken bottles, cans, glass, sharp objects, or any other debris which might cause injury or accidents shall be in the pool.

(B) Glass bottles are prohibited in the pool area.

(C) No operational activities or conditions of facilities which are likely to cause illness or injury shall be allowed to exist.

(D) Food and/or drinks are prohibited in the pool/spa water.

(E) Steps, benches, and ladders as specified in 20 CAR § 136-107(i) shall be provided.

(2) Area lighting as specified in 20 CAR §§ 136-107(g), 136-117(e), and 136-118(c) shall be provided.

(3) A recommended list of pool rules is located in Appendix C.

(4) No diving board, tower, or platform greater than ten feet (10') above the water level shall be permitted in any public pool, except by express permission of the Secretary of the Department of Health.

(5)(A) Main drain grates, antientrapment covers, and vacuum-fitting covers shall be in place and in good condition whenever the pool/spa is in use.

(B) Missing or damaged covers shall constitute grounds for immediate closure.

(d) Prevention of unauthorized entry.

(1) General.

(A) Provisions must be made to exclude unauthorized entry to the facility.

(B) The barrier may be any fence, wall, or structure which prevents entry except through self-closing, self-latching, and lockable gates or doors.

(C) The barrier shall surround all four (4) sides of the pool/spa and not prevent visual observation of the pool.

(D) In any new construction of an outside pool or spa, an adjacent building (clubhouse, locker room, etc.) may only serve as one (1) barrier side.

(E) In existing construction, each entry from any adjacent building to the pool area must contain either an alarm on the door, cardkey access to pool deck, install fencing between building structure and pool, or other means which may be reviewed on a case-by-case basis.

(F) Shrubbery shall not constitute an acceptable barrier.

(2) Barrier design.

(A) The barrier shall not be less than four feet (4') in height.

(B) The topography outside the barrier shall be considered during the construction phase to ensure the barrier will provide a minimum four-foot barrier.

(C) Barriers shall not have open spaces greater than four inches (4") horizontally.

(D) There shall not be more than four inches (4") of space between the bottom of the barrier and the ground's surface or the pool deck.

(E) Any new fence/barrier construction or renovation shall comply with the design criteria set forth in this section.

(3) Multiple facilities.

(A) Where a pool and a wading pool are located within a common pool area, separate fencing which meets the above criteria is required for the wading pool.

(B) Where other multiple facilities are located within a common pool area (i.e., pool and spa) provisions shall be made to prevent access to any pool or spa, which is closed for maintenance, repair, or as the result of noncompliance.

(C) Locking spa covers and portable fencing which meet the above criteria are acceptable options for closure.

(D) Floating spa covers are not acceptable.

(E) Signs shall be posted indicating which facility is closed.

(F) The need for separate fencing for water recreation attractions, such as water theme parks, shall be evaluated on a case-by-case basis.

(4) Indoor pools/spas.

(A) The area must be secured by self-closing doors for dedicated pool/spa rooms or by barriers as required above, wherever the pool/spa are located where guest rooms or lobbies open onto the pool area.

(B) Some means of access control (such as room key or card) should be provided to prevent entry by unattended children.

(5) Water slides.

(A) The entire water slide area including the plunge pool, pool deck, the slide, and the walk area to the slide, shall be fenced to prevent access when the slide is not in operation.

(B) The department may approve alternative enclosure materials and methods when such materials and methods are found to be equivalent to those described above.

(e) Chemical storage and handling.

(1) Chemicals shall be:

(A) Kept in the original containers; and

(B) Used and stored in accordance with label instructions.

(2) All rooms used for storage of pool chemicals shall be plainly marked by any combination of words, pictures, or symbols.

(f) **Emergency communications.** All pools shall have a suitable means of communication for emergency services conveniently available on the premises capable of reaching 911 dispatch services.

(g) **Accident report.**

(1) The operator of any pool or other related facility shall report any drowning or other death or serious injury occurring on the premises, within seventy-two (72) hours of the occurrence.

(2) A written report shall be submitted to the department on forms provided by the department.

(h) **Life-saving equipment and safety equipment.**

(1) **Required equipment.**

(A) Readily accessible and conspicuously mounted lifesaving equipment shall be provided at all swimming pools.

(B) One (1) unit of lifesaving equipment shall consist of the following:

(i) One (1) shepherd's crook and pole (recommended by the department); and

(ii) One (1) ring buoy or similar flotation device such as an American Red Cross-approved rescue tube.

(C)(i) One (1) unit of life saving equipment shall be required for each two thousand square feet (2,000 sq. ft.) of water surface or a fraction thereof.

(ii) A minimum of one (1) ring buoy or similar flotation device shall be provided for spas.

(iii) For multiple facilities, common equipment may be used in quantity based on the square footage requirement for total water surface area of the facilities.

(iv) It is recommended that instructions for proper usage of life saving equipment be posted.

(2) **Lifeline.**

(A)(i) All pools in which the maximum pool depth exceeds five feet six inches (5'6"), shall install a lifeline located at or before the five feet (5') depth area or areas separating the shallow area or areas and the deep area or areas.

(ii) Wave type pools shall be exempt from this requirement.

(B)(i) Pools which provide lane swimming may remove a lifeline during periods of lap swimming or routine maintenance.

(ii) The lifeline shall be replaced following any maintenance activities or lap swimming to ensure safety for recreational swimming.

(iii) The lifeline shall be maintained in good condition.

(iv) Connections for lifeline shall be recessed in the walls at appropriate locations, and in a manner which presents no hazard to swimmers.

(i) **First aid equipment.** Each pool and other related facility shall have basic first aid equipment available to care for minor injuries.

(j) **Electrical requirements.**

(1) Wiring and grounding for lights and all electrical power for pool equipment must conform to the codes of the current edition of the National Fire Protection Association National Electric Code.

(2) Ground fault protection shall be provided on all electrical circuits within the pool area.

(3) Junction boxes must:

(A) Be above the pool water level; and

(B) Not be a trip hazard.

(k) **Spa timers and emergency shut-off switch.**

(1) A maximum setting of fifteen (15) minutes for the timer to activate the jet system shall be:

(A) Installed on all new or remodeled spa installations; and

(B) Located at a distance that would require the bather to exit the spa to restart.

(2) An emergency shut-off switch shall also be required for all new or renovated spas and shall be conspicuously placed and accessible.

(l) **Signs and safety markings.**

(1) All signs and depth markers must be clearly readable at all times.

(2) **No diving.**

(A) This sign shall be displayed in conspicuous locations at all pools not meeting the minimum requirements for diving i.e., less than five and one-half feet (5 1/2') deep.

(B) The sign shall read "NO DIVING" with minimum three-inch lettering.

(C) "NO DIVING" tiles placed conspicuously on the deck shall meet this requirement.

(3) **Warning – No lifeguard on duty.**

(A) This sign shall be posted at pools and other related facilities where lifeguard service is not required and not provided.

(B) The sign shall be in clearly legible letters at least three inches (3") high.

(C) The sign shall also state children should not use the pool without an adult in attendance.

(4) **Spa warning sign.**

(A) On a warning sign, precautions for spa patrons shall be posted.

(B) The following language is recommended:

CAUTION

Elderly persons and those suffering from heart disease, diabetes, or high blood pressure should consult a physician before using the spa pool.

No person suffering from a communicable disease, transmissible via water, shall use the spa pool.

Persons using prescription medications should consult a physician before using the spa pool.

Individuals under the influence of alcohol should not use the spa pool.

No person shall use the spa pool alone.

Pregnant women should not use the spa pool without consulting their physicians.

Persons should spend no more than 15 minutes in the spa at any one session.

All children under 14 years of age shall be accompanied by a responsible adult observer.

No person shall run or engage in horseplay in or around the spa pool.

Patrons should shower before and after using the spa pool.

(5) **Water slides safety signs.** The following warnings must be posted at all slides:

Always slide feet first and only after previous slider has cleared the area.

No jumping or diving from slide.

Only one (1) person at a time allowed on the slide.

No play equipment on slide.

(6) **Maximum bather load.** The maximum bather load as determined by 20 CAR § 136-120 shall be conspicuously posted at the entrance of the pool/spa.

(7) **Pool depth markers.** Depth markings shall:

(A) Plainly mark the water depth in a unit of measurement, i.e. feet, inches, or meters on the vertical wall at or above the water level and on the horizontal surface of the coping or deck edge;

(B)(i) Be located on the vertical pool wall to be read from the waterside.

(ii) Where markings cannot be placed above the water level, markings shall be placed in other areas and plainly visible to users in the pool;

(C) Be located on the coping or deck within eighteen inches (18") of the water edge and readable while standing on the deck facing the water;

(D) Be slip resistant;

(E) Be placed at the maximum and minimum water depths and at all points of slope change;

(F) Meet the above requirements on irregularly shaped pools and designate the depths at all major deviations in shape;

(G) Be at a three-inch minimum height on the deck and at a two-inch minimum height on the vertical pool wall;

(H) Be applied in a contrasting color; and

(I) Additional markers may be required based on pool design.

(8) **Spa or wading pool depth markers.** A spa or wading pool shall have a minimum of two (2) three-inch depth markers indicating depth on the deck and/or posted on a sign or wall.

(9) **Step and bench edges.**

(i) These shall be marked in a contrasting color or contrasting slip resistant tile.

(ii) The vertical and horizontal faces on bench edges shall be marked.

(iii) All steps shall have horizontal edges marked.

(10) **Spa water temperature.**

(A) The maximum water temperature for a spa or therapy/spa pool shall be:

(i) One hundred and four degrees Fahrenheit (°401) F); and

(ii) Posted at the spa in three-inch letters.

(B) A nonbreakable thermometer shall be provided for use in the spa.

(11) **Oils, body lotions, and minerals.** Oils, body lotions, minerals, or other materials not associated with chemicals used for water chemistry balance and disinfection of the water are prohibited in the spa, and this information shall be posted.

(m) **Animals prohibited in pool/spa area.** Except for service animals for the physically impaired, animals are not allowed in the enclosure.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-120. Bather load.

(a) The maximum number of bathers in the pool at any one time shall not exceed a number determined by the following formula:

Swimming pool maximum bathing load (SPMBL).

$$\text{SPMBL} = \frac{A - S}{(30)} + \frac{S}{(15)} \quad (\text{For outdoor pools})$$

$$\text{SPMBL} = \frac{A - S}{(30)} + \frac{S}{(25)} \quad (\text{For indoor pools})$$

Where

A = Total area of water surface in square feet.

S = Area of pool less than 5.5 feet deep in square feet.

(b) **Note.** This formula will be used in determining certain features of pools as noted elsewhere in this part.

(c) Bather load requirements shall not apply to:

- (1) Class D wading pools;
- (2) Class C special purpose pools; or
- (3) Class E therapy pools/spas.

(d) Bather load requirements for Class C, special purpose pools, shall be determined on a case-by-case basis by the Department of Health.

(e) Bather load requirements for Class F spas shall be based on one (1) bather for every ten square feet (10 sq. ft.) of water surface.

(f) When applicable the maximum bather load shall:

- (1) Be conspicuously posted at the entrance of the facility; and
- (2) Not be exceeded.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-121. Operation and maintenance.

(a) Cleanliness of pool/spa.

(1) Floating scum, sputum, or debris shall not be allowed to accumulate in the pool.

(2) Water levels in pools shall be maintained and operated to remove such material continuously.

(3) The bottom and sides of the pool shall be cleaned as often as necessary to maintain a condition of cleanliness.

(4) The sides and bottom of pools, decks, and other surfaces shall be kept free of slime and algae.

(5) Procedures for disinfection and management of fecal accidents are located in Appendix D.

(b) Cleaning and maintenance of pool/spa and the facility.

(1) All parts of the pool/spa and related pool/spa facilities and equipment shall be maintained in good repair.

(2) Floors shall be kept free from cracks and other defects.

(3) Walls, ceilings, partitions, doors, lockers, and similar surfaces and equipment shall be refinished as often as necessary to be kept in a state of good repair.

(4) Pool/spa surfaces including but not limited to tile, plaster, and/or paint shall be maintained in good repair.

(c) Operational records.

(1) Operational records shall be kept on forms provided by the Department of Health.

(2) Records shall be retained by the pool owner/manager for review upon request by the department.

- (3) Such mandatory records include but are not limited to:
 - (A) Swimming pool operational records; and
 - (B) Report of accident or drowning at pools, spas, etc.
- (4) Recommended documentation includes:
 - (A) Record of pool contamination incident; and
 - (B) Employee MSDS training (see Appendix for form copies).

(d) Inspections.

(1) At all reasonable times, representatives of the department shall have access to, and are hereby empowered to enter the premises of any public pool or other related facility and to make inspections to determine whether the provisions of these rules of the department are being complied with.

(2)(A) Results of inspections shall be recorded on department forms which summarize the requirements of this part.

(B) The completed inspection report shall specify a reasonable period of time for correction of any violation found.

(3)(A) All violations of critical items shall be corrected within ten (10) days following the inspection.

(B) A follow-up inspection will be conducted to ensure compliance.

(4) All other items should be corrected as soon as possible, but in any event by the time of the next routine inspection unless the violation involves construction as addressed in 20 CAR § 136-123, Existing pools/spas.

(e) Pool/spa closure.

(1) Any public pool is to be closed by the owner whenever the following conditions exist:

(A) The pool is being operated without a valid permit from the department;

(B) Any critical item is noted on the inspection report;

(C) Any required safety equipment is missing or any violation of 20 CAR § 13-119;

(D) The mandatory chemical operation parameters are not in compliance as indicated in Appendix B;

(E) An imminent health hazard as determined by the department;

(F) A suspected water-borne outbreak is reported to the department; and

(G) When the time limits have been exceeded for the correction, repair, or replacement of defective, missing, or unapproved equipment.

(2) In the case of voluntary pool closure, one (1) or more signs shall be posted conspicuously stating:

(A) "Pool Closed";

(B) "No Swimming"; or

(C) Similar language.

(3)(A) When the owner fails to close a facility, the department shall close the facility and post a "CLOSED" sign or signs.

(B) When closed by the department, the facility shall not reopen until an inspection has been conducted by the department indicating compliance.

(f) Communicable disease.

(1) No person suffering from an open cut, rash, skin lesion, or any skin disease or any possible communicable disease transmitted via water shall be permitted to patronize the pool.

(2) No person having a communicable disease shall work at any pool in a function in which there is a likelihood that they will transmit the disease to any other person.

(g) Bather clothing.

(1) Only clothing designed for use in swimming shall be allowed in the pool.

(2) Cutoffs shall not be worn in the pool unless hemmed.

(3) Street shoes are not allowed in the water.

(4) Children should not be allowed in the pool or wading pool with disposable diapers unless covered with plastic pants.

(h) Facility closure or abandonment.

(1)(A) A pool or other related facility for which no operation permit is in effect and which is not in use for two (2) weeks or longer shall be covered, drained, or maintained by the owner in a condition which prevents creating a hazard to health or safety.

(B) If drained, care should be taken to ensure that:

(i) The facility is not damaged by subsurface hydrostatic pressure;

and

(ii) Access by animals and humans is restricted.

(2) If a public swimming pool/spa is to be permanently closed:

(A) The pool/spa shall be filled in or removed; and

(B) The water and drainage connections removed.

(3) Written notification must be made to the department.

(4) Any public swimming pool/spa left in a state of disrepair or out of service for more than one (1) swimming season shall be drained and secured so as to not create an imminent health hazard or nuisance.

(i) **Food service operations.** Any food service operations conducted at the pool facility shall meet the current department Rules Pertaining to Retail Food Establishments, 20 CAR pt. 170.

(j) **Winterizing.**

(1) All equipment shall be properly winterized, if and when the pool/spa is closed for operation at the end of the season.

(2) When the pool/spa is closed all gates shall be locked.

(3) A means to completely drain all piping and equipment shall be provided.

(k) **Transfer of ownership.** Each holder of a permit for operation shall:

(1) Notify the department in writing upon sale, lease, or other transfer of responsibility for the facility; and

(2) Supply the department with the name and address of the new owner/operator.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-122. Annual permit for operation.

(a) **Annual permit for operation requirement.** No municipality, person, firm, corporation, association, organization, or institution shall operate, maintain, or allow the use of any public swimming pool or other water-related facilities without a written permit from the State Health Officer or authorized representative.

(b) **Opening of a pool.**

(1)(A) Prior to approval of the application for permit, whether existing or new construction, the Department of Health shall inspect the facility to determine compliance with this part.

(B) The department shall issue a permit to the applicant if the inspection reveals that the facility is in compliance with the requirements of this part.

(C) Each permit shall expire December 31 following the date of issue.

(2) Applications for renewal of permits for existing public swimming pools will be mailed to the operator prior to January 1 of each year.

(3) The annual permit fee to operate a public swimming pool shall be twenty-five dollars (\$25.00), due and payable January 1 and each January 1 thereafter.

(4) If a public swimming pool and a food service establishment are owned and operated at the same location by a common individual, corporation, firm, or other entity, the annual swimming pool permit fee shall be ten dollars (\$10.00), due and payable January 1.

(5)(A) The permit fee shall be paid to the department before the permit is issued.

(B) The permit shall be kept and displayed in a conspicuous manner, properly framed, at the pool for which it is issued.

(c) **Suspension and revocation of permit.**

(1) Failure to comply with this part or failure to maintain equipment and facilities in good condition will be cause to immediately suspend this permit until such time the condition which caused the suspension has been corrected.

(2) Continuing violations of this part will be cause for the permit to be revoked by the State Health Officer or his or her authorized representative after a legal hearing as provided for in the Arkansas Administrative Procedure Act, Arkansas Code § 25-15-201 et seq.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-123. Existing pools/spas.

(a) All existing pools/spas which are not in compliance with this part at the effective date shall be exempt from compliance with those construction provisions which do not pertain directly to health and safety of the patrons.

(b) All pools/spas, when remodeled, shall comply with all applicable provisions of this part pertinent to the renovation, unless a variance is granted by the Department of Health.

(c) Any variance shall be granted in writing for a specific time period.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-124. New product approval and acceptance — Submission of technical data.

(a) The manufacturer or other sponsor proposing an alternative equipment, product, or material for use in pools/spas shall make a written request to the Department of Health for acceptance of the equipment, product, or material by the department.

(b) Technical information as required by the department to complete its review shall be submitted.

(c) Such information is typically as follows:

(1) **Equipment and material items.** Technical documents, including approval or acceptance by other states, NSF approval information describing the

proposed product and including catalog cut sheets, drawings, specifications, and promotional literature shall be submitted; and

(2) Chemical products.

(A) Technical documents including information on chemical formulation, toxicity, and efficacy studies and data.

(B) United States Environmental Protection Agency registration manufacturer's proposed use and directions for and promotional literature shall be submitted.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-125. Other related rules.

All pools and other related facilities shall comply with all appropriate state laws and rules, including but not limited to the following:

- (1) Department of Health Rules Pertaining to General Sanitation, 20 CAR pt. 131;
 - (2) The Arkansas Sewage Disposal Systems Act, Acts 1977, No. 402, and Department of Health Rules Pertaining to Onsite Wastewater Systems, 14 CAR pt. 21;
 - (3) Department of Health Rules Pertaining to Public Water Systems, 20 CAR pt. 140;
 - (4) Department of Health Rules Pertaining to Retail Food Establishments, 20 CAR pt. 170;
 - (5) Arkansas Plumbing Code, 17 CAR pt. 65;
 - (6) Fuel Gas Code, 17 CAR pt. 67;
 - (7) Arkansas State Mechanical Code, 17 CAR pt. 260;
 - (8) Arkansas state licensing law for contractors (Act 50);
 - (9) Any federal regulations pertaining to pools and spas;
 - (10) The Virginia Graeme Baker Pool and Spa Safety Act, 15 U.S.C. § 8001 et seq. (VGBA – enforced by the United States Consumer Protection Safety Commission);
- and

(11) The Americans with Disabilities Act, 42 U.S.C. § 12101 et seq. (ADA – enforced by the United States Department of Justice).

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-126. Severability.

If any provisions of this part, or the application thereof to any person or circumstances, is held invalid, such invalidity shall not affect other provisions or applications of this part's applications, and to this end the provisions hereto are declared to be severable.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-127. Repeal.

All rules and parts of rules in conflict herewith are hereby repealed.

Authority. Arkansas Code § 20-30-103.

20 CAR § 136-128. Penalty clause.

Any person operating a public swimming pool who fails or refuses to comply with any of the provisions of this part or otherwise operates a swimming pool in violation of Arkansas Code § 20-30-101 et seq. or this part shall be guilty of a misdemeanor and upon conviction shall be fined not less than fifty dollars (\$50.00) and not more than five hundred dollars (\$500) for each offense and each day after sufficient notice has been given shall constitute a separate offense.

Authority. Arkansas Code §§ 20-30-102, 20-30-103.

Appendix A. Minimum and Maximum Pool Dimensions

Link:

<https://CodeOfARRules.arkansas.gov/docs/CARCodeAppendices/Appendices/84/20CARpt.136AppendixA.pdf>

Appendix B. Arkansas Pool Chemical Operational Parameters

Link:

<https://CodeOfARRules.arkansas.gov/docs/CARCodeAppendices/Appendices/85/20CARpt.136AppendixB.pdf>

Appendix C. List of Recommended Rules for All Pool and Other Related Facilities

Link:

<https://CodeOfARRules.arkansas.gov/docs/CARCodeAppendices/Appendices/86/20CARpt.136AppendixC.pdf>

Appendix D. Procedures for Disinfection and Management of Fecal Accidents in Pool and Other Related Facilities

Link:

<https://CodeOfARRules.arkansas.gov/docs/CARCodeAppendices/Appendices/87/20CARpt.136AppendixD.pdf>

Appendix E. Employee MSDS Training

Link:

<https://CodeOfARRules.arkansas.gov/docs/CARCodeAppendices/Appendices/88/20CARpt.136AppendixE.pdf>

Appendix F. Record of Pool Contamination Incident

Link:

<https://CodeOfARRules.arkansas.gov/docs/CARCodeAppendices/Appendices/89/20CARpt.136AppendixF.pdf>

Appendix G. Swimming Pool Operation Record

Link:

<https://CodeOfARRules.arkansas.gov/docs/CARCodeAppendices/Appendices/90/20CARpt.136AppendixG.pdf>

Appendix H. Report of Accident or Drowning At Pools, Spas or Other Related Facilities

Link:

<https://CodeOfARRules.arkansas.gov/docs/CARCodeAppendices/Appendices/91/20CARpt.136AppendixH.pdf>