FINAL DRAFT
AQUATIC HEALTH ORDINANCE

for the

CITY OF ALEXANDRIA

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ARTICLE 1. General Provisions

Sec. 11-11-1 Title.

This Ordinance shall be known and may be cited as the City of Alexandria Aquatic Health Ordinance.

Sec. 11-11-2 Purpose.

The purpose of this Ordinance is to:

A. Ensure that all aquatic facilities are constructed, operated, and maintained in a manner which does not adversely affect the public health or safety;

B. Set forth the requirements necessary to secure a permit for construction, ownership and operation of an aquatic facility.

Sec. 11-11-3 Administration and Enforcement.

The Director of the Alexandria Health Department shall administer and enforce this Ordinance.

Sec. 11-11-4 Scope.

This Ordinance shall apply to all aquatic facilities intended for recreational use as indicated and herein defined. Facilities constructed for competitive swimming or competitive diving shall meet the requirements set forth by this Ordinance and/or by the Director and/or the applicable FINA Standards. This Ordinance applies only to public pools and does not apply to residential pools serving a single family residence or duplex residence. Swimming pool facilities, spa pool facilities, interactive water feature facilities and waterpark facilities for which building permits are issued subsequent to the effective date of this Ordinance shall be constructed in accordance with the provisions of the VUSBC, the National Electrical Code, the City of Alexandria electrical, fire prevention, plumbing, and zoning ordinances, and this Ordinance. Whenever any provision of any Virginia state code or other City Code imposes a greater requirement or a higher standard than is required under this Ordinance, compliance with the provision of such -state code or other City Code shall be required. Nothing in this Ordinance shall be held to preclude compliance with the applicable provisions of these codes, standards, specifications and recommendations.

Sec. 11-11-5 Definitions.

For the purposes of this Ordinance, the following words and terms shall have the following meaning, unless the context clearly indicates otherwise.

Above-ground pool means any pool having the pool tank above ground level.

Activity pool means a pool which features recreational water activities which may include, but is not limited to, one or more of the following: climbable bars, ropes, chutes, bubblers, fountains, anchored floating play components or other similar devices.

ANSI means American National Standards Institute.

Aquatic facility means a facility for water recreation or water therapy including, but not limited to, a public pool facility, spa pool facility, a waterpark facility, or an interactive water feature facility.

ASME means American Society of Mechanical Engineers.

ASTM means American Society for Testing and Materials.

Attendant means a person at a waterpark facility trained to operate an attraction and control the patrons in a safe and orderly manner.

Attraction or ride means any of the specific types of features at waterpark facilities involving partial or total immersion of the patron.

Backwashing means the process of thoroughly cleaning the filter media or elements by reversing flow, dislodging the filter aid, and/or removing accumulated debris and discharging it to waste.

Bathhouse facility means the enclosed structure and related areas, used by patrons of an aquatic facility prior to entering the pool(s), which contain the dressing rooms, showers, toilets, lavatories, saunas, and steamrooms.

Bed and Breakfast is a transient lodging facility permitted by the Director that has six or fewer bedrooms and eighteen or fewer guests.

Breakpoint chlorination means the addition of a sufficient amount of chlorine to water to destroy the combined chlorine present. Breakpoint chlorination is approximated by the addition of chlorine sufficient to obtain a total chlorine residual ten times the original combined chlorine residual.

Center line means the path defined by geometric midpoints of a component or structure, generally used for consideration of the slide path in flume rides and the separation of diving boards or platforms in a diving area.

Child care facility means any child care center, preschool, or family day home.

Children's activity pool means an activity pool, designed primarily for the use of children, having a maximum depth of 24 inches.

Chute means a structure which contains and directs the path of travel and rate of descent of a patron. A chute may be tubular, trough-like, curved or flat-bottomed. A chute generally uses water only as a lubricant.

Combined residual disinfectant means the amount of halogen or other approved disinfectant which has chemically combined with organic nitrogen compounds (e.g. combined chlorine).

Competitive diving board means any diving board recommended by the manufacturer for diving competition.

Control fence means a woven steel wire, chain link, picket, solid board type fence, wall or equivalent barrier capable of directing bathers through the appropriate entry onto the pool deck or to a specific location within the pool facility's perimeter fence.

Cross-ventilation means the movement of air from an outside source into and out of a filter/chemical storage room, sufficient to prevent the accumulation of chemical vapors or dust. The cross-ventilation shall be provided by a mechanical exhaust fan.

Deck means the smooth, impervious, non-slip walking surface located within the perimeter enclosure and around the aquatic facility.

Director means the Health Director of the Alexandria Health Department or his/her designee.

Disinfectant means an agent that disinfects by destroying, neutralizing, or inhibiting the growth of harmful organisms.

Diving area means the minimum dimensions of an area within the pool necessary to provide safe entry from a diving board or platform.

Diving board means the mechanism used for entering a swimming pool, consisting of a semi-rigid board, that derives its elasticity through the use of a fulcrum mounted below the board, and the stand that supports the semirigid board.

Diving platform means the raised rigid stage used for diving.

Drop slide means a sloped chute or flume exiting the user above the pool operating water level into a receiving pool.

Filter means a device that separates solid particles from water by circulating water through a porous substance, the filter media or element.

FINA means the Federation Internationale de Natation Amateur.

Flume means a trough-like or tubular structure which uses a significant volume of water to transport the user.

Free available residual disinfectant means the amount of disinfectant which is available to inactivate microorganisms and oxidize organic matter (e.g. free chlorine), and which has not reacted with organic nitrogen compounds or any other material in pool water.

Foothold means areas that are greater than one and three-quarter inches wide as measured horizontally that expose horizontal surfaces whose top planes are separated by a vertical distance that is less than 45 inches.

GFCI means Ground Fault Circuit Interrupter.

Handhold means the same as foothold

Hard-wired telephone means a telephone that has a direct wire handset and connection to the main telephone system.

Hydrojet means a fitting which blends air and water creating a high velocity, turbulent stream of air enriched water.

Hydrostatic pressure relief valve means any valve which, when properly installed, will relieve underground water pressure caused by high water tables under and/or around the pool shell.

Industry standards mean the American National Standards Institute (ANSI), or similar national standards, as approved by the Director.

In-ground pool means any pool constructed with the pool tank below ground level.

Injury or illness report means the written record of all facts regarding any death, near drowning, injury or illness associated with any regulated aquatic facility.

Inner-tube ride means an attraction where users ride inner tube-like floatation devices through a series of chutes, channels, flumes, and/or pools.

Interactive Water Feature Facility (IWFF) means a structure or area designed to allow contact with water, but having standing water less than or equal to one inch.

Internal communication system means any combination of devices permitting the immediate passage or exchange of messages between the personnel within the aquatic facility.

Lifeguard means an individual, fifteen years of age or older, who is trained and certified in lifeguarding, first aid, and cardio-pulmonary resuscitation (CPR).

Lifeguard stand means an elevated lifeguard station, which complies with OSHA standards for elevated platforms, and includes a seat and platform. An umbrella emplacement sleeve or alternative shade producing structure is required for outdoor stands. The stand may be portable, and shall be located to allow full visual coverage of the lifeguard's assigned area of responsibility.

Lifeguard station means a lifeguard stand or other designated work station of a lifeguard.

Light color means any color which has a Munsell Value (V) notation of 6.5 or greater and a Munsell Chroma (C) notation of 7.0 or less.

MSDS means Material Safety Data Sheets.

Make-up water means potable water which is added to a pool to bring the water level up to the waterline.

Maximum facility load means the maximum number of patrons permitted in any aquatic facility at any one time. The maximum facility load is limited by the sum total of the maximum individual swimming pool and individual spa pool bather loads, bathhouse plumbing fixture restrictions, or other restrictions imposed by the Director.

Maximum individual swimming pool bather load means the maximum number of patrons permitted within the water of an individual pool at any one time.

Maximum individual spa pool bather load means the maximum number of patrons permitted within the water of an individual spa pool at any one time.

NSF means National Sanitation Foundation.

ORP means Oxidation Reduction Potential.

OSHA means the Occupational Safety and Health Administration.

Overflow trough or gutter means the surface water collection system designed to remove surface water through pool overflow.

Owner means any person, or legally authorized representative of any person, who owns or leases an aquatic facility and in whose name the owner's annual or seasonal permit is issued. The person in charge of the aquatic facility shall be deemed to be the designee of the owner.

Person means any and all entities, including individuals, firms, partnerships, associations, public or private institutions, municipalities or political subdivisions, governmental agencies, or public or private corporations organized under the laws of this Commonwealth or any other state or country.

Perimeter fence means a closed-type vertical barrier which completely encloses and secures the pool area and prevents unauthorized entry.

Pinch hazard means any configuration of components that could pinch or entrap the fingers, toes or any other part of the human body.

Plummet means a line that is perpendicular to the water surface and extends vertically through a point located at the front edge of a diving board and on the centerline.

Pool means any man-made structure, basin, chamber or tank located either indoors, outdoors, or both, containing a body of water with sufficient depth for complete or partial immersion of the body.

Pool area means a pool and all decks, grounds, and other areas located within the perimeter enclosure.

Pool facility means any pool(s), together with the buildings, equipment and appurtenances pertaining to such a body of water including, but not limited to, all areas located within the perimeter enclosure.

Pool management company means any person, firm, corporation or association contracting to manage or operate an aquatic facility.

Pool operator means a person, sixteen years of age or older, trained to conduct the operation of an aquatic facility.

Pool operator's certificate means the document issued to a person who has successfully passed a pool operator's exam recognized by the Director and administered by an exam proctor that is approved by the Director.

PPM means parts per million.

PSI means pounds per square inch.

Public pool means any pool, other than a residential pool serving a single family dwelling, or duplex residence that is not a bed and breakfast or a child care facility, which is intended to be used collectively by a number of persons for swimming, recreation, fitness, relaxation, or therapeutic purposes. Man-made structures such as plastic and/or inflatable wading pools designed for the temporary impoundment of uncirculated and/or undisinfected water will not be permitted as a public pool.

Radius of curvature means the radius arc which denotes the curved surface from the point of departure from the vertical sidewall (springline) of the pool to the pool bottom (e.g. coving).

Receiving pool means a pool located at the end of a water slide or drop slide that is designed to safely receive the rider of an attraction.

Recessed stairs means a step or series of steps that do not protrude beyond the pool wall. Recessed stairs extend down from the deck with the riser of the bottom step terminating at the pool wall and bottom.

Recreational diving board means any diving board that is not recommended by the manufacturer for diving competition.

Remodel means to change, rearrange, or modify an aquatic facility's structure, circulation system and/or appurtenances, such that the design, configuration and/or operating characteristics are different from the original design, configuration, and/or operating characteristics. The term "remodel" does not include normal maintenance and repair.

Repair means the replacement of existing construction with equivalent materials for the purpose of maintenance and the replacement of a previously approved piece of equipment with an equivalent unit having the same specifications, operating characteristics, and certifications.

Skimmer means a mechanical device connected to the pool water recirculation piping which is used to drain the pool water surface and is equipped with a weir, a flow adjustment device, and a removable and cleanable basket designed to trap small solids.

Slide means a drop slide or waterslide as defined herein.

Slow river means a circuitous stream of pool water, moved by booster pumps or other means, providing a continuous current in which patrons are transported by flotation devices or other means.

Spa pool means any pool intended to be used for recreational or therapeutic use which may include a water jet and/or aeration system, may be heated or cooled, and is not drained, cleaned or refilled after each individual use. The term includes, but is not limited to, units designed for hydrojet recirculation, hot water, cold water, mineral bath, air induction bubbles, or any combination thereof. Common terminology for a spa pool includes, but is not limited to, therapeutic pool, hydrotherapy pool, whirlpool, hot spa, and hot tub. The term spa pool excludes spa pools used by or under the direct supervision and control of licensed medical personnel located in a medical facilityand spa pools serving a single family dwelling or duplex residence that is not a bed and breakfast or a child care facility.

Springline means the point from which the pool wall breaks from vertical and begins its arc in the radius of curvature to the pool bottom.

Superchlorinate means to achieve a rapid increase in the chlorine residual within the pool water to oxidize organic impurities, destroy algae and/or achieve breakpoint chlorination.

Swimming pool means any pool intended to be used for public recreational swimming and/or public recreational diving, and means the same as public pool.

Total residual disinfectant means the arithmetic sum of free available residual disinfectant and combined residual disinfectant.

Turnover time or period means the time required to recirculate the equivalent of the total volume of pool water through the filter system.

UL means Underwriters Laboratory.
VUSBC means the Virginia Uniform Statewide Building Code.
Wading pool means a swimming pool designed primarily for use by small children which is separate from any other swimming pool within a pool area. A wading pool shall have a depth greater than one inch but not exceeding eighteen inches.
Waterline means the midpoint of the operating range of the skimmers when there are no users in the pool. For overflow systems, the waterline is defined as the top of the overflow rim.
Waterpark facility means a water contact facility with design and operational features which provide recreational activities that are different from those associated with a conventional swimming pool and purposefully involve the immersion of the body either partially or totally in the water. Such recreational activities include, but are not limited to: water chutes, water flumes, slow rivers, activity pools, receiving pools, sprinklers, fountains, decorative showers, and wave pools.
Water slide means a chute or flume that discharges the user at or below the pool operating water level.
Wave pool means a pool producing waves which usually begin at the deep end and proceed toward and dissipate at the shallow end.

Sec. 11-11-6 Permits for Construction and Remodeling; Plan Review and Construction and Pre-Operational Inspections.
A. Building and other applicable permits shall be obtained before any aquatic facility regulated under this Ordinance may be constructed. A building permit or other applicable permits may be required from the building official(s) before the remodeling of an aquatic facility regulated under this Ordinance. Plans and specifications shall have been approved by the Director prior to the issuance of such permits.
B. If a building permit is not required, plans and specifications for the remodeling of an aquatic facility regulated under this Ordinance shall be submitted to the Director for review and approval. Duplicate copies of the plans and specifications shall be submitted to the Director unless additional sets are required.
C. The approval of any plans or specifications shall not be viewed to be a determination that the said plans or specifications are free from error. The owner shall have final responsibility for the accuracy and completeness of the plans and specifications, as well as for subsequent construction and installation.
D. A plan review fee shall be paid. The fees for the review of plans and associated construction inspections are as established in Sec. 11-11-25 and shall be set by the City Council.
E. The requirements of this Ordinance are in addition to the requirements of all other applicable ordinances and codes, including but not limited to, plumbing, building, electrical, mechanical, zoning, and fire.
F. Prior to being put into service for the public, the construction of each aquatic facility shall be inspected for compliance with this Ordinance and approved by the Director.
G. A pre-operational inspection shall be conducted annually on each seasonal aquatic facility. Where more than one annual pre-operational inspection is required for a facility before it can be approved for operation, the Director shall assess a reinspection fee for each additional inspection after the initial inspection. The fees for pre-operational

reinspections are as established in Sec. 11-11-25 and shall be set by the City Council. Reinspection fees shall be paid before a reinspection is conducted.

Sec. 11-11-7 Owner's Permit Required; Fee for Same.

A. No owner shall allow an aquatic facility to be operated unless the owner has secured an annual or seasonal permit from the Director. The permit shall be posted in a location conspicuous to the public on the premises of the facility. Prior to issuing the permit, the Director shall determine that the aquatic facility is in compliance with the requirements of this Ordinance, that all required application fees in Sec. 11-11-25 have been paid, and that the aquatic facility has been approved by the electrical official. The permit shall be issued in the name of the owner for the calendar year, or if a seasonal pool, for the period during the calendar year the facility will be in operation. In the event the owner is operating a facility without the required annual or seasonal permit, the Director shall order the immediate closure of the facility. An order of closure shall be effective upon service of a written notice to the owner of the facility and shall remain in effect until such time as the owner secures the annual or seasonal permit.

B. The fees for the permit required by Sec. 11-11-7 (A) are as established in Sec. 11-11-25 of this Ordinance and shall be set by the City Council.

C. The owner and the pool management company, if applicable, of any aquatic facility are responsible for the facility being operated, maintained, and managed in accordance with the requirements of this Ordinance.

Sec. 11-11-8 Facility Closure and Suspension of the Owner's Permit.

A. The Director shall order the immediate closure and permit suspension of any aquatic facility upon finding that a substantial hazard exists to the health or safety of those who utilize the facility. No person shall operate any aquatic facility subject to an order of facility closure and permit suspension.

B. An order of facility closure and permit suspension shall be effective upon service of a written notice to the permit holder or his/her designee or to the person in charge of the aquatic facility at the time the substantial hazard is discovered. The order shall remain in effect until such time as the Director determines that the hazard no longer exists.

C. The holder of a permit for a facility subject to an order of facility closure and permit suspension may request a hearing as described in Sec. 11-11-15.

Sec. 11-11-9 Revocation of an Owner's Permit.

The Director may revoke an owner's permit upon the finding of serious, repeated, or flagrant violations of any of the requirements of this Ordinance or interference with the performance of the Director's duties. No person shall operate any aquatic facility subject to an order of permit revocation. An owner's permit may not be revoked unless the permit holder has been served with written notice of the Director's intent to revoke the permit at least thirty calendar days prior to the date of proposed revocation, stating the reason the permit is subject to revocation and informing the permit holder of the opportunity for a hearing before the Director. The holder of an owner's permit subject to an order of permit revocation may request a hearing as described in Sec. 11-11-15.

Sec. 11-11-10 Pool Operator Requirements.

A. It shall be unlawful to operate a swimming pool or waterpark facility unless it is under the immediate control of a person trained in the basics of swimming pool operation and who possesses a valid pool operator's certificate accepted by the Director, with valid photo identification and that person is on the premises during operation of the swimming pool or waterpark facility.

B. A spa pool or interactive water feature facility shall not be in violation of this subsection if it is under the control of a person who possesses a valid pool operator's certificate accepted by the Director, with valid photo identification. That person need not be on the premises during the operation of the spa provided that he/she is available on-call, the on-call telephone number is posted in view of the patrons, and the operator can return to the facility within 30 minutes frame.

C. The pool operator shall have the original pool operator's certificate, with valid photo identification available for inspection during the operation of the aquatic facility.

D. A pool operator shall be at least 16 years of age and shall have successfully passed a pool operators examination approved by the Director and administered by an exam proctor that is approved by the Director.

E. A pool operator's certificate shall be issued only to a person who has passed the pool operator's examination and shall not be assignable or transferable, and shall be valid only for a period not to exceed three years from the date of issuance. Expired certificates must be reissued in accordance with Sec. 11-11-10 (D). Reasonable fees may be charged for the proctoring of a pool operator’s exam and issuance of a pool operator’s certificate by the Director or a third party approved by the Director.

F. Swimming pools or waterpark facilities operating without a trained pool operator holding a valid pool operator’s certificate on the premises or with an operator unable to satisfactorily demonstrate basic knowledge of swimming pool operation or in a manner that adversely impacts the public health and safety are subject to immediate closure and permit suspension.

Sec. 11-11-11 Issuance of a License to Pool Management Companies

A. Any pool management company that contracts to operate any aquatic facility owned by another person must obtain a license from the Director to operate a pool management company. No pool management company shall allow an aquatic facility to be operated under its management unless the pool management company has secured an annual license from the Director. A copy of the license shall be posted in a location conspicuous to the public on the premises of each pool facility managed by the pool management company.

B. The application fee for the license required in Sec. 11-11-11(A) are as established in Sec. 11-11-25 and shall be set by the City Council.

C. The owner and the pool management company of any aquatic facility are responsible for the facility being operated, maintained, and managed in accordance with the requirements of this Ordinance.

D. In the event a pool management company is operating an aquatic facility without the required annual license, the Director shall order the immediate closure of the facility. An order of closure shall be effective upon service of a written notice to the owner of the facility or his/her designee and shall remain in effect until such a time as the pool management company secures the required annual pool management company license or

the pool facility owner employs a properly licensed pool management company or assumes full and active managerial control of the facility.

Sec. 11-11-12 Requirements for Pool Management Companies

A. Any person desiring to obtain a pool management company license as required by Sec. 11-11-11(A) shall apply in writing on an application approved by the Director.

B. A pool management company license shall be issued only to a company that employs at least one person who has a pool operator's certificate approved by the Director and who can provide proof of at least 5 years of experience as a certified pool operator within the previous 7 years.

C. The fee required in Sec. 11-11-11(B) shall be paid to the Director upon application for a pool management company license.

D. A pool management company license shall be valid for a period of three years from the date of issuance.

Sec. 11-11-13 Revocation of a Pool Management Company License

A. The Director may order the revocation of a pool management company license issued under this Ordinance for serious, flagrant and repeated violations of any of the requirements of this Ordinance, or for interference with the Director in the performance of his/her duty.

B. The Director shall notify the pool management company in writing, at least sixty calendar days prior to the date of proposed revocation, of the specific reasons for which the license is to be revoked and the procedure for requesting a hearing as described in Sec. 11-11-15.

Sec. 11-11-14 Service of Notices.

A notice of owner's permit or pool management company license suspension or revocation required by this Ordinance is properly served when it is delivered to the owner, owner's agent, or pool management company or when it is sent by registered or certified mail, return receipt requested, to the last known address of the owner or pool management company. A copy of the notice shall be filed with the records of the Health Department.

Sec. 11-11-15 Hearings.

Any owner or pool management company who has been denied an owner's permit or pool management company license, or any holder of an owner's permit or pool management company license who has received an order of suspension or revocation, may request a hearing by filing a written request in the office of the Director, within ten business days of the service of the order of permit/license denial, suspension or revocation. The Director shall conduct a hearing within ten business days of receipt of a hearing request and render a decision in writing to the appellant with five business days after the hearing is held. If a written request for a hearing is not filed within the time permitted, the permit denial or order is sustained.

Sec. 11-11-16 Variances.

The Director may grant a variance to the requirements of this Ordinance.

A. Request for a variance.

Any owner who seeks a variance shall apply in writing to the Director. The application shall include:

1. a citation of the Ordinance section to which the variance is requested;
2. a statement as to why the applicant is unable to comply with the Ordinance section to which the variance is requested;
3. the nature and duration of the variance requested;
4. a statement of reasons why the public health or safety would not be jeopardized if the variance was granted, and
5. a full description of any policies, procedures or equipment that the applicant proposes to use to ameliorate any potential increase in health or safety risks created by granting the variance.

B. Evaluation of a variance application.

The Director shall complete review a variance application and act on it within twenty business days from the receipt of the written application. If variance application is incomplete or the Director requests additional information from the applicant, the Director shall act on the variance application within twenty business days after the complete application or requested additional information is submitted. In evaluating the variance application, the Director shall consider the following factors:

1. unusual circumstances unique to the applicant's facility;
2. the hardship to the applicant that would result if the variance were denied;
3. the effects that such a variance would have on the health and safety of the public at the aquatic facility;
4. any proposed policies, procedures or equipment that could ameliorate any potential increase in health or safety risks created by granting the variance and,
5. other health or safety factors as determined by the Director.

C. Disposition of a variance request.

1. If the Director or his/her agent approves a variance request, the applicant shall be notified in writing of the decision. Such notice shall identify the aquatic facility and its location, the nature of the variance, and shall specify the period of time for which the variance will be effective and any conditions attached to the variance. Failure to comply with the specified conditions will result in the immediate revocation of the variance. The effective date of the variance shall be upon receipt by the applicant or other designated date acceptable to the applicant and the Director.
2. The Director or his/her designated agent may deny any application for a variance by sending a written variance denial notice to the applicant. The applicant may petition the Director for a hearing within ten business days, from receipt of the variance denial notice, to challenge the variance denial.
3. No permit holder or applicant may challenge the terms or conditions set forth in the variance after ten business days have elapsed from the date of issuance.

D. Each variance shall be posted in a conspicuous place for the public to view. Each variance is revoked when the permit attached to it is revoked. A variance is not transferable unless otherwise provided in writing at the time the variance is granted.

Sec. 11-11-17 Condition of Equipment and Premises.

All equipment shall be maintained in satisfactory condition during the operation of any aquatic facility. In addition, the premises, including the pool(s) and deck(s), of any aquatic facility shall be maintained in a clean and sanitary condition and shall be kept in good repair.

Sec. 11-11-18 Animals.

A. No animal shall be permitted within any aquatic facility; provided, however, this section shall not apply to support animals that provide assistance to the physically challenged. Support animals that provide such assistance shall not enter the pool water.

B. Dogs may be allowed to enter swimming pools on the final day of the season provided that humans may not swim during or after the time that the dogs swim, and provided that the pool is drained, cleaned and refilled before humans use the pool again.

Sec. 11-11-19 Bathing Attire

A. Bathers shall not be permitted to wear street clothing in a pool, spa or waterpark facility.

B. Clothing that may restrict a person's ability to swim shall not be allowed.

Sec. 11-111-20 Water Supply.

A public water supply shall be used at all aquatic facilities unless other sources of water are approved by the Director.

Sec. 11-11-21 Sewage Disposal.

All sewage generated from the plumbing fixtures within an aquatic facility shall be discharged into an approved sewage treatment works.

Sec. 11-11-22 Inspections.

Upon presentation of the appropriate credentials, the Director shall have the power to enter, at reasonable times, any private or public property for the purpose of inspecting and investigating conditions relating to the enforcement of this Ordinance.

Sec. 11-11-23 Emergency Order.

If an emergency exists, the Director may issue an emergency order necessary for the preservation of public health and safety or for the protection of patrons and personnel using any aquatic facility. The emergency order shall state the reasons and precise factual basis upon which it is issued, the actions which an owner, pool operator and/or pool management company are required to take, and the time period for which it is effective. A copy of the emergency order shall be served to the owner of the facility or his/her designee and may be publicized in any manner deemed appropriate by the Director.

Sec. 11-11-24 Grandfather Clause**.**

A. Except as provided in this section, the design and construction requirements of this Ordinance shall not apply to any aquatic facility that was constructed prior to the effective date of this Ordinance in accordance with the design and construction requirements of the ordinance in effect at the time construction was completed

(hereinafter referred to as an "existing facility") and that continues to meet those requirements.

B. The design and construction requirements of this Ordinance shall apply to the remodeling of an existing facility unless the Director determines, in writing, that alternate requirements, including, but not limited to, the design and construction requirements in effect at the time of construction shall apply to the remodeling of the existing facility.

C. Each separate body of water at an aquatic facility shall have a separate circulation, filtration and disinfection system.

D. The Director shall order modifications to the design or construction of an existing facility if he/she finds that any condition exists that endangers the health or safety of the facility's patrons or personnel.

Sec. 11-11-25 Fee Schedule.

The following fees shall be assessed by the Director and the amount of these fees shall be set by the City Council:

1. Owner's permit application fee required by Sec. 11-11-7(A).
   This fee shall be paid to the Director (i) annually by December 31st for facilities operating twelve months a year, or (ii) prior to the issuance of the owner's permit for facilities operating on a seasonal schedule,
2. Plan review and construction inspection fee required by Sec. 11-11-6(D),.
3. Management company license application fee required by Sec. 11-11-11(B),
4. Pre-operational reinspection fee required by 11-11-6(G),
5. Pool operator's certificate proctoring fee as provided for in 11-11-10 (E), if the pool operator's exam is proctored by the Director, and
6. Pool operator's certificate issuance fee as provided for in 11-11-10 (E), if the pool operator's certificate is issued by the Director.

Sec. 11-11-26 Civil Penalties for Violations;

A. It shall be unlawful for any person to fail to comply with any of the regulations promulgated pursuant to this chapter. Any person who fails to comply with any such regulation shall be in violation of this chapter and, for each such violation, shall be liable for a civil penalty. Each day, or any part thereof, during which a violation of this chapter exists or persists shall constitute a separate violation of this chapter.

B. Falsifying or presenting to the Health Department a falsified pool operator's certificate, CPR certificate, lifeguard certificate or electrical inspection shall be a class one civil violation as specified in Sec. 1-1-11 of the Alexandria City Code. Violation of Sec. 11-11- 7(A) or Sec. 11-11-11(A) of this chapter shall be a class two civil violation as specified in Sec. 1-1-11 of the Alexandria City Code. Any other violation of this chapter shall be a class four civil violation as specified in Sec. 1-1-11 of the Alexandria City Code.

1. The civil penalty for a class one civil violation shall be issued to the pool management company.
2. In the event that the facility is self-managed by the owner, or the owner submits the electrical inspection, the civil penalty shall be issued to the owner.

C. Upon determining that one or more violations of this chapter exists, the Director, or his/her delegate, shall cause a written notice of the violation or violations to be delivered

to the owner or operator of the aquatic facility that is in violation of this chapter, or to the officer, employee or agent of such owner or operator who is the person in charge of the aquatic facility. The notice shall, with respect to each violation, contain the following information:

1. a description of the violation, with a citation to the regulation that has been violated;
2. a statement of the amount of the civil penalty to be assessed;
3. a statement that the person in violation may elect to make an appearance in person, or in writing by mail, to the Treasurer of the City, and admit liability for or plead no contest to the violation, abate the violation, and pay the civil penalty established for the violation, and a statement of the date by which such penalty shall be paid; and
4. a statement that, in the alternative, the person in violation may elect to contest the violation by filing with the Director, within ten days of receipt of the notice of violation, a written notice of the person's election to contest the violation, and further that, in the event the person elects to contest the violation, the person shall be entitled to an administrative hearing on the violation before the Director, or a designee of the Director.

d. If, after a hearing held pursuant to 11-11-26(c)(4), the director or the designee of the director finds that a violation of this chapter has occurred, the person found to be in violation shall, within ten days of the finding, pay the civil penalty originally assessed.

e. If a person charged with a violation of this chapter does not elect to admit liability or plead no contest and to pay the assessed penalty, or, following a hearing under subsection 11-11-26(c)(4) which results in a finding that the person has violated the chapter, does not pay the assessed penalty, the violation shall be tried in the Alexandria General District Court upon a warrant in debt or a motion for judgment, with the same right of appeal as provided in civil actions at law.

f. A plea of no contest to, or a finding or admission of liability to, a violation of this chapter shall not be deemed a criminal conviction.

g. The remedies provided in this section are cumulative and not exclusive. The designation of a violation of this chapter as a civil violation shall not be construed as prohibiting city officials from initiating appropriate administrative or civil procedures to prevent, correct, restrain or abate violations of the chapter.

ARTICLE 2. Swimming Pools; Design and Construction

Sec. 11-11-27 **Location.**

The location of a swimming pool shall in no way hinder the operations for which it is designed nor adversely affect patron safety or water quality. Public pools shall not be located in areas subject to flooding or inundation by ground water drainage.

Sec. 11-11-28 **Access.**

A. *Outdoor pools.* Direct and unobstructed access to any swimming pool area shall be provided for the admission of emergency and service vehicles, equipment and personnel. An emergency access lane providing direct access for emergency vehicles shall terminate at each pool facility's emergency gate required in Sec. 11-11-50. Emergency access lanes shall be kept clear and unobstructed.

B. *Indoor pools.* Emergency access to indoor or elevated swimming pools shall be provided at the entrance nearest the pool or the elevator or stairway leading to the pool. Permanent and conspicuous signs shall be posted indicating the most direct route to an indoor or elevated pool. An emergency access lane providing direct access for emergency vehicles shall terminate at the entrance nearest the indoor or elevated swimming pool, or the elevator or stairway leading to the indoor or elevated swimming pool. Emergency access lanes shall be kept clear and unobstructed.

Sec. 11-11-29 **Construction materials and components.**

Swimming pools shall be constructed of materials which are rigid, inert, impervious, and non-toxic to humans. The materials for components and accessories to be used in and around swimming pools shall be such that the operational strength of the assembly shall not be adversely affected by the exposure to external conditions or normal temperature extremes; and shall be chemically compatible with the materials used in the operation and maintenance of the swimming pool. In addition, construction materials shall provide a tight tank to which a smooth, easily cleanable surface can be applied. The swimming pool surface shall be composed of an impervious material which will retain a smooth, slip resistant, easily cleanable finish without surface cracks or open joints, and shall be finished in a white or light color. Sand or earth bottoms shall not be permitted. Materials other than those described in this section may be approved by the Director.

Sec. 11-11-30 **Design.**

Swimming pools may be of any dimension or shape provided that the satisfactory recirculation of pool water can be obtained and no undue hazards to patrons are created by the dimensions or shape of the pool.

Sec. 11-11-31 **Hydrostatic pressure relief valve.**

In all in-ground swimming pools with water depths exceeding 18 inches, 1 or more hydrostatic pressure relief valve(s), or other hydrostatic relief system as approved by the Director, shall be installed.

Sec. 11-11-32 **Slope of bottom.**

In water depths of less than 5 feet, the maximum slope of any swimming pool, shall not exceed 1 to 12. In depths greater than 5 feet, the slope shall not exceed 1 to 3.

Sec. 11-11-33 **Vertical Walls and Coving.**

A. All corners formed by the intersection of pool walls, floors, or other pool walls shall be coved.

B. Vertical walls shall not be greater than 11 degrees from plumb.

Sec. 11-11-34 **Diving Area, Diving Boards, and Diving Platforms; Minimum Requirements.**

A. Diving boards and diving platforms may be installed in a diving area, alone or in combination, provided that the minimum requirements set forth in this section are met.

B. Side rails, including safety netting or other safety restraints may be required by the Director for diving boards one meter in height or greater.

C. At least 16 feet and 5 inches of free and unobstructed head room shall be provided above every diving board and diving platform.

D. When a recreational diving board is installed in a diving area, the minimum dimensions and water depths within the diving area shall meet the requirements specified in Table I and Table II. Diving board height measurements falling in between two categories of Table I and Table II shall comply with the more stringent requirement.

E. When a diving platform or competitive diving board is installed in a diving area, the minimum dimensions and water depths in the diving area shall meet the applicable FINA standards and/or the standards required by the Director.

F. When a diving board is installed in combination with a diving platform, the minimum distance between the center line of the diving board or edge of the diving platform and the center line of an adjacent diving board, the edge of an adjacent diving platform, and/or the pool sidewall edge shall meet the applicable FINA Standards or the requirements specified in Table I, whichever is more stringent.

Table I. Diving Board Height and Separation Distance Requirements.

TABLE INSET:

Height of Diving Board Above the Water Line	Minimum Distance of Board Center Line to Adjacent Board Center Line of Equal or Lesser Height	Minimum Distance of Board Center Line to Sidewall
0 to 0.61 meter	10'	10'
0.62 to 0.77 meter	11'	11'
0.78 to 1.00 meters	11'	11'
1.01 to 2.0 meters	12'	12'
2.01 to 3.0 meters	12'	12'
>3.0 meters	*	*

*As required by the Director and/or the applicable FINA standard.

Table II. Minimum Dimensions and Depths Relative to Board Height

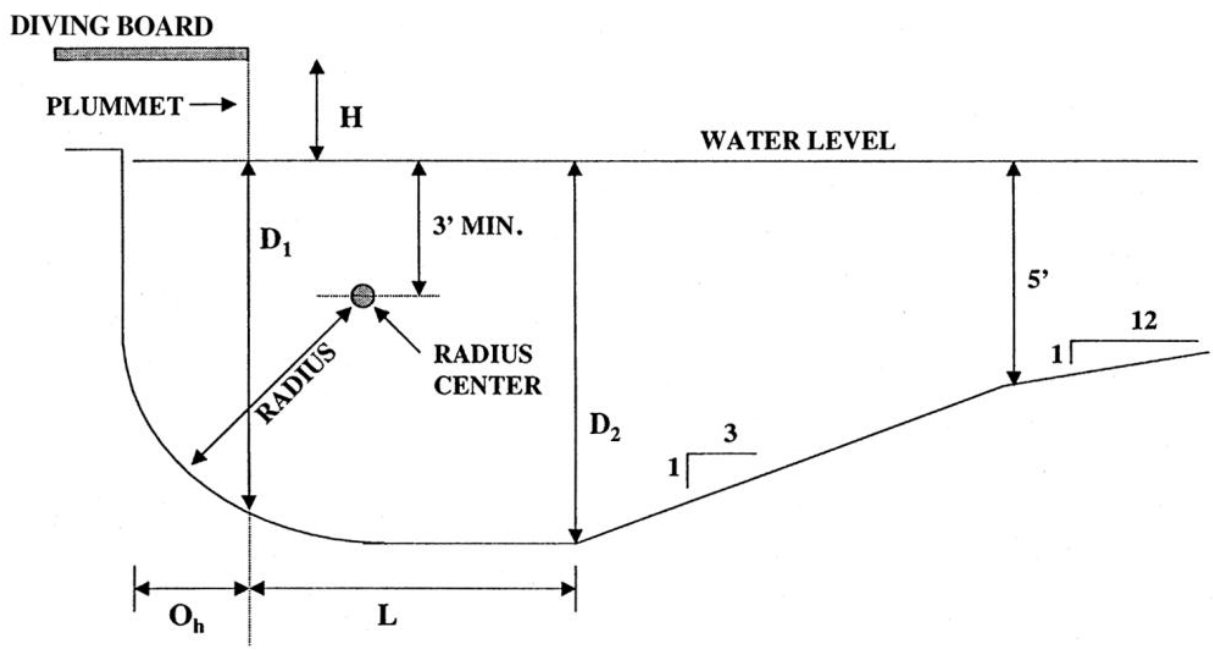
TABLE INSET:

Height of Diving Board	Minimum Depth of Water	Minimum Distance	Minimum Depth of Water at	Minimum Overhang of

Above the Water Line	at Plummet	Ahead of Plummet	Distance L From Plummet	Diving Board Beyond Pool Edge
H	D 1	L	D 2	O h
0 to 0.61 meter	8'6"	11'	8'6"	3'
0.62 to 0.77 meter	9'	11'6"	8'10"	4'
0.78 to 1.00 meter	11'	12'	10'9"	5'
1.01 to 2.00 meters	12'	16'5"	11'10"	6'1"
2.01 to 3.00 meters	12'6"	19'9"	12'2"	6'1"
>3.00 meters	*	*	*	*

*As required by the applicable FINA Standards or the Director.

Figure 1. Cross-Sectional Diagram of Swimming Pool Illustrating Distances Referenced in Table II.



Sec. 11-11-35 **Handholds.**

Swimming pools shall be provided with suitable handholds around their perimeter. Handholds may consist of any one or a combination of the following:

- coping, gutter ledges or flanges, or decks which have a top edge that provides a suitable slip resistant handhold located not more than 12 inches above the water level;
- ladders, steps, or hand rails; and/or,
- other methods approved by the Director.

Sec. 11-11-36 **Stairs, Steps, Ladders, and Bench Seats.**

A. Egress.

A minimum of two means of egress shall be provided for swimming pools with a perimeter of 100 feet or less. One additional means of egress shall be provided for each additional 200 feet of pool perimeter, or fraction thereof. Additional means of egress may be required as determined by the Director. The location of the means of egress shall be consistent with the design of the swimming pool. A means of egress shall be provided at both sides of the diving area.

B. The design and construction of swimming pool stairs, ladders, and bench seats shall conform to the following:

1. The treads of all stairs, ladders, and step holes shall be of non-slip construction.
2. When stairs or bench seats are constructed, they shall be recessed into the pool deck, and shall conform to the VUSBC.
3. The top and leading edge of all stair treads and bench seats shall be marked by a permanent, non-slip band of contrasting color that is a minimum of one inch in width and is located within two inches of the step or bench edge.
4. Recessed step holes shall not protrude into the pool. The recessed step shall have a minimum tread width of six inches, a minimum tread length of twelve inches, a minimum height of five inches, and shall drain into the pool to prevent the accumulation of dirt. Each set of recessed step holes shall be provided with handrails on both sides of recessed step holes to fully service all treads and risers.
5. Below the water level, there shall be a clearance of not more than six ~~four~~ inches nor less than three inches between any ladder tread edge, measured from the pool wall side of the tread, and the pool wall.

Sec. 11-11-37 **Recirculation System.**

A. All swimming pools shall be equipped with a recirculation system which, at a minimum, consists of a pump, a filter, connecting piping, fittings, valves, disinfecting equipment, necessary pipe connections to the inlets and outlets, a skimmer and/or overflow gutter and main drains. A separate recirculation system shall be provided for each swimming pool.

B. The recirculation system shall be designed to accommodate the following required maximum turnover time:

1. Wading pool, two hours;
2. Any other swimming pool, six hours.

C. Adequate provisions shall be made for backwashing and/or cleaning of all filters.

Sec. 11-11-38 **Filter Room.**

A. Swimming pool facilities shall have a room(s) or structure which encloses the filtration equipment, pumps, electrical equipment, chemical feed equipment, and other

recirculation and filtration system appurtenances. The room(s) or structure shall provide working area and access above and around all equipment no less than that specified by the manufacturer and sufficient to permit routine maintenance. The room(s) or structure shall be provided with a lockable door(s) of sufficient width to permit the removal of equipment. The entrance to the filter room(s) shall be easily accessible from the deck so the pool operator can enter the room(s) without having to exit the enclosed pool area. The room(s) or structure shall be impervious to water and resistant to the chemicals necessary for the operation of the facility.

B. The floor of the filter room(s) or structure shall be designed to provide adequate drainage with a minimum floor slope of 1 to 48 and a maximum floor slope of 1 to 24 to a floor drain and shall be kept dry at all times, particularly in the vicinity of electrical panels. Discharging filter backwash water onto the floor is prohibited.

C. The filter room and chemical shall be equipped with mechanical cross-ventilation that provides one air change per minute.

D. Illumination of at least thirty foot-candles, measured 24 inches above the floor, shall be provided above equipment and working areas. A minimum of two light fixtures shall be installed, and all light fixtures shall be shielded.

Sec. 11-11-39 **Filters and Gauges.**

A. The recirculation system shall be equipped with a filtration system that is NSF listed, or the equivalent, and will filter the entire water volume of the swimming pool within the required turnover time specified in Sec. 11-11-37(B). Filtration equipment shall be operated continuously, 24 hours per day. Valves shall be provided at appropriate locations to allow the isolation and maintenance of equipment. Filter components which require servicing shall be accessible for inspection and repair and installed according to the manufacturer's specifications and recommendations. All pressure systems shall be provided with a manual or automatic means to permit the release of air which may accumulate within the filter tank. Design criteria for the indicated type of filters shall be as follows:

1. *High-rate filter*. A filter utilizing a media capable of filtration at a high rate of flow. The rate of flow shall not be less than five gallons per minute per square foot of filter surface area, nor greater than twenty gallons per minute per square foot of filter surface area. The backwash rate of flow shall be at the rate specified by the manufacturer.

2. *Diatomaceous earth filter*. A filter utilizing diatomaceous earth as a filter media.

a. *Pressure or vacuum type*. A diatomaceous earth filter through which the rate of flow does not exceed two gallons per minute per square foot of filter surface area.

b. *Pressure or vacuum with slurry feeder*. A filter that is equipped with a feeder that continuously feeds a diatomaceous earth suspension and has a rate of flow not exceeding three gallons per minute per square foot of filter surface area.

c. Separation tanks or a sump pit with a stand pipe shall be installed to collect spent diatomaceous earth so that it can be collected and disposed of in an approved manner. Alternative methods for diatomaceous earth

collection may be approved by the Director. When using diatomaceous earth filters with separation tanks, the separation tank shall be provided with a means of release or a lid which provides a slow and safe release of pressure and shall have a readily visible precautionary statement affixed that warns the user that the air release must be opened before opening the separation tank.

d. Piping and valves shall be provided for all diatomaceous earth filters to allow for a pre-coat cycle that re-circulates water directly from the outlet to the inlet of the filter without returning to the swimming pool.

3. *Rapid sand filters.* A filter utilizing sand as the filter media, with a filtration flow rate not exceeding three gallons per minute per square foot of filter area. The backwash rate of flow shall be four times the filtration rate.

4. Other filtration systems whose performance equals or exceeds those described above may be used in a pool recirculation system with the approval of the Director.

5. *Filter cartridges.* The flow rate through a filter cartridge shall not exceed the design rate or a maximum of 0.375 gallon per minute per square foot of filter surface area. Cleaning of filter cartridges must be in accordance with the manufacturer's recommendations. One complete extra set of filter cartridges shall be available at all times to facilitate cleaning.

B. *Gauges and flow meters.* The filter system shall be provided with a minimum of one influent pressure gauge for each filter and one effluent pressure gauge following the filter system. Recirculation system pumps shall be fitted with a vacuum and pressure gauge installed as near as practical to the pump suction and discharge pipe connections. All pressure gauges shall measure pressure directly in pounds per square inch (psi). Vacuum gauges shall measure in inches of mercury. The system shall have a flow meter on the return line to measure the flow of filtered water being returned to the swimming pool. The flow meter shall be of fixed calibration, shall measure in gallons per minute, and shall be properly sized to indicate the design rate of flow at approximately mid-scale. Gauges and flow meters shall be readily accessible and clearly visible, shall be in good repair, and shall be located and installed according to the manufacturer's specifications and recommendations.

Sec. 11-11-40 **Pumps and Strainers.**

A. *Pump.* A removable and reinstallable pump(s) shall be installed with adequate capacity for the required turnover time specified in Sec. 11-11-37(B). Whenever possible, the pump(s) shall be so located as to eliminate the need for priming. If the pump(s) or suction piping is located above the overflow level of the swimming pool, the pump(s) shall be self-priming. The pump(s) shall be capable of providing a flow adequate for the backwashing of filters. Pumps shall be securely supported.

B. *Hair and lint strainer.* All pump systems shall have a hair and lint strainer. The hair and lint strainer baskets shall be corrosion resistant with openings not exceeding 1/8 inch in size, which provide a free flow area of at least four times the area of the pump suction line at the strainer connection, and shall be accessible for frequent cleaning. An extra hair and lint strainer basket shall be provided for each hair and lint strainer.

Sec. 11-11-41 **Piping System.**

A. The piping system for swimming pools shall be composed of NSF listed materials or their equivalent designed for the following operations:

1. filling the swimming pool;
2. re-circulating the pool water through the treatment equipment;
3. backwashing or washing each filter to waste;
4. operating a suction cleaner (if provided);
5. emptying the pool; and
6. draining the system.

In addition, the piping system of any swimming pool containing a hydro-jet system or water conditioning system shall be composed of NSF listed materials, or equivalent, which are capable of supporting such systems.

B. There shall be no direct connections between the swimming pool recirculation system and the sewer or potable water supply. Fill spouts, when installed, shall be located under diving boards, under guard chairs, adjacent to pool ladder handrails, or otherwise protected to preclude a tripping hazard and shall be properly supported if not inherently self-supporting. Fill spouts shall not project into the space above the pool water surface by more than two inches beyond the edge of the pool. Other means of filling the pool shall comply with the VUSBC and be approved by the Director. Cross-connections shall be prevented by providing an air gap between the highest possible flood level of the pool and the pool fill spout. The air gap shall not be less than two fill spout pipe diameters or less than six inches. An approved backflow prevention device may substitute for the air gap.

C. The system shall have a means of discharging filter backwash or other pool water to waste as follows:

1. Waste from backwashing or draining of a pool shall be discharged in a manner approved by the Director. When only a sanitary sewer is available to a swimming pool, the rate of discharge is subject to the approval of the appropriate authority for sanitary sewers and treatment facilities.
2. An air gap to prevent a cross-connection between waste discharge piping and recirculation piping shall be provided.
3. Discharge receptor and piping of sufficient size to accept backwash water and prevent backflooding.
4. A sight glass in the backwash discharge line in a readily observable location.
5. In the event the backwash waste pipe will not accommodate the backwash flow, the design and installation of a holding tank shall be required. The holding tank shall be sized to contain 110 percent of the volume of water required to adequately clean the filter(s) at the backwash flow rate and length of time specified by the filter manufacturer.

D. The ~~visible~~ piping system shall be securely anchored, supported or braced, unless inherently self-supporting. Visible piping shall be marked with permanent tags, labels or markings to clearly identify the direction of flow and shall be color coded as follows:

1. Freshwater blue (to check valve)
2. Backwash black
3. Influent yellow

4. Effluent white
5. Suction cleaner orange (to control valve)
6. Recirculation green (Auxiliary recirculation not part of the filtration system; such as, but not limited to, water features, jets, fountains, water falls, aeration systems or similar features)
7. Heater piping red (to nearest isolation valves)

E. All piping shall be designed to minimize friction losses and to carry the required quantity of water at a velocity not to exceed eight feet per second for copper discharge piping, and ten feet per second for discharge piping other than copper. Suction velocity for all piping shall not exceed six feet per second. Pipe suction velocity may also be limited by the maximum flow rate specified by the manufacturer of the suction outlet covers installed in the swimming pool.

F. All piping and appurtenances included in the recirculation and filtration system shall be inspected and approved by the Director prior to covering. All plastic pipe connections and fittings shall be joined using the type primer and cement recommended by the pipe manufacturer. The primer and cement shall be of different colors so that they can be easily identified by visual inspection. All piping shall be tested at the time of inspection to at least 25 psi of pressure. All subsurface pool piping shall be imbedded in and covered with sand or an approved equivalent.

G. All valves shall be clearly identified with permanent markings or tags which are referenced by a pool water recirculation system operation manual and/or placard.

Sec. 11-11-42 **Main Drain Outlets.**

A. Swimming pools constructed after the effective date of this Ordinance shall employ a main drain outlet system that complies with (1) or (2) of this section. Swimming pools constructed prior to the effective date of this ordinance shall have a main drain outlet system that incorporates one or more of the following measures to prevent entrapment:

1. A minimum of two interconnected main drain outlets, that cannot be isolated by valves or other means, for each recirculation pump system. Main drain outlets shall be located in the deepest part of the pool. All piping associated with the main drain outlets shall be of equal diameter and each main drain shall be of equal size. Main drain outlets and associated piping shall be hydraulically designed to provide equal flow though each main drain outlet. A main drain outlet shall be no less than three feet and no more than twenty feet from another main drain outlet, and no more than fifteen feet from a pool side wall;

2. One unblockable main drain outlet for each recirculation pump system. An unblockable main drain outlet shall be a minimum of 18 inches by 23 inches in size. Unblockable main drain outlets with sizes other than 18 inches by 23 inches may be used provided that they are approved by the Director.

3. A safety-vacuum release system for each recirculation pump system. These systems shall be tested on an annual basis by the owner, and documentation shall be provided in the pump room near the device specifying who performed the test, when the test was performed, how the test was performed, and whether the system passed the test. Additionally, these systems shall be maintained and calibrated according to the manufacturer's specifications.

4. Alternative methods that prevent suction outlet body entrapment and injury may be approved by the Director.

B. A main drain outlet opening and other suction outlet openings shall be covered with a protective grate or anti-vortex cover which is not hazardous to patrons, is anchored in accordance with the manufacturer's specifications and recommendations, and is designed to prevent body entrapment or injury. Main drain grates or covers shall be secured so that their removal requires the use of tools. Main drain covers shall be manufactured and installed according to the specifications set forth by the ASME/ANSI and NSF International standards for suction fittings. The cover, frame, and all components shall be corrosion resistant and shall be designed to withstand the maximum anticipated forces generated by active use.

C. The design of a main drain outlet or outlets, and the components of main drains outlets shall comply with ANSI/ASME A112.19.8-2007.

D. The water velocity through a main drain outlet shall not exceed the maximum water velocity specified by the manufacturer. The maximum flow rate possible at the manufacturer’s specified velocity shall meet or exceed the total system flow.

Sec. 11-11-43 **Inlets.**

All inlets located in pool walls shall be spaced not more than twenty feet on center around the pool perimeter. When inlets are located in the pool bottom, the number of inlets and their location shall be designed to ensure the proper distribution of filtered water. The minimum number of bottom inlets shall be determined by dividing the perimeter of the pool, in feet, by twenty. All wall inlets, except makeup water inlets and wading pool inlets shall be at least fifteen inches below the operating water level of the pool, except for prefabricated gutters with 45 degree angle inlets in the bottom. Each inlet shall be provided with a means of adjusting flow, through a range of at least fifty percent of its design capacity. Inlet flow controls shall be readily accessible.

Sec. 11-11-44 **Pool Suction Cleaner.**

A suction cleaner shall be provided. Where a suction cleaner is operated by the re-circulating pump, a device or devices shall be provided for regulating the flow(s) from the pool outlets. The suction cleaner line shall be connected through a hair and lint strainer. Portable electric suction cleaners shall be UL rated and connected to a GFCI protected electrical outlet. Waste from a portable suction cleaner shall be disposed of as solid waste. Hydraulic jet-type suction cleaners shall be permitted in lieu of other suction cleaners if the fresh water pressure is 30 psi or greater and the water service line is provided with an approved backflow preventer.

Sec. 11-11-45 **Overflow Gutters and Skimmers.**

Overflow gutters or skimmers shall be provided on the vertical wall(s) of all swimming pools, and designed to adequately skim the pool surface. The overflow gutter or skimming system shall be capable of continuously removing eighty percent or more of the re-circulated water and returning it to the filter.

A. Where overflow gutters are used, they shall extend completely around the swimming pool except at steps, recessed ladders, ramps, and stairs. The overflow gutter shall be designed to serve as a handhold. Overflow gutters having a surge capacity less than one

cubic foot per linear foot of pool perimeter shall be indirectly connected to the recirculating system through a properly sized and designed surge tank/balancing tank with a minimum surge capacity of one gallon per square foot of water surface area. Overflow gutters having a surge capacity of one cubic foot, or greater, per linear foot of pool perimeter shall be connected to a properly sized and designed balancing tank. The gutter, drains and piping draining to the surge tank/balancing tank shall be designed to rapidly remove overflow water caused by recirculation, displacement, wave action or other causes produced during the maximum swimming pool load. The opening into the gutter beneath the coping shall not be less than four inches and the interior width of the gutter shall not be less than three inches. Where gutters are used, they shall be designed to prevent patron entrapment or injury. The overflow edge or lip shall be rounded and not greater than 2 ½ inches thick for the top two inches. The overflow outlets shall be provided with outlet pipes at least two inches in diameter. The outlet fittings shall have a clear opening in the grating at least equal to 1½ times the cross-sectional area of the outlet pipe.

B. Where skimmers are used they shall be provided at the rate of one skimmer per forty feet of pool perimeter or fraction thereof, or one per 400 square feet of pool water surface area or fraction thereof, whichever is greater. They shall be spaced so as to provide maximum skimming action of the pool surface.

1. Skimmer throats shall be no greater than the width required for ten-inch weirs.
2. Skimmer weirs shall be automatically adjustable to variations in water level over a minimum range of four inches.
3. A removable basket or screen to entrap large matter shall be provided in each skimmer.
4. The flow rate through the skimmer shall not be less than twenty gallons per minute, nor greater than 35 gallons per minute. Each skimmer shall be provided with a means of adjusting the flow through the skimmer.
5. Skimmer systems shall be designed so that all skimmers are interconnected.
6. Skimmer lids shall be securely in place at all times.

Sec. 11-11-46 **Decks.**

A. All swimming pools shall have a continuous deck at least five feet wide, including the width of the coping, extending around the entire perimeter of the pool. In addition, there shall be at least three feet of clear, unobstructed deck behind any diving stand, guard stand, or other deck mounted equipment. All decks shall be constructed of continuous poured concrete or other approved smooth, impervious material which shall have a smooth, non-slip finish. All decks shall have a slope of not less than 1 to 48 or more than 1 to 24 and shall be designed to conduct drainage away from the swimming pool in a manner that will not create a slip hazard or contribute to the ponding of water. All decks shall be properly supported and any fill under the decks shall be properly compacted to prevent decks from settling. Roof run-off or other drainage shall not be wasted onto the deck. All areas surrounding the deck shall have surface drainage directed away from the pool deck area or be served by a drainage system approved by the Director.

B. Deck risers and steps shall comply with the VUSBC.

Sec. 11-11-47 **Lighting.**

A. An indoor swimming pool or an outdoor swimming pool used after dark shall be equipped with lighting fixtures to light all parts of the pool, the pool water, and the swimming pool area. A sufficient number of light fixtures shall be installed to supply a minimum of ten foot candles for the pool surface area and thirty foot candles for the pool deck area measured six inches above the pool deck and water surface. The lighting fixtures shall be designed and installed so that the lifeguard(s) and patrons can clearly see every part of the swimming pool, including decks, diving boards, and other appurtenances, without interference from glare. Lighting fixtures shall be installed in a manner which creates no hazard to patrons or employees. All lighting fixtures shall be prohibited directly above the water surface area or within three feet horizontally of the pool rim except as permitted by the National Electrical Code. All light fixtures shall be shielded.

B. Underwater pool lighting, when installed, shall provide at least one watt per square foot of water surface area, or the equivalent, and shall be equipped with GFCI(s) as required by the National Electrical Code.

Sec. 11-11-48 **Safety Requirements.**

A. Swimming pools equipped with pool water heaters shall have a fixed thermometer installed in the main return line. The thermometer shall be located sufficiently downstream from where the water heater effluent pipe connects to the main return line to allow the mixing of the heated and unheated water. The thermometer shall be designed and located so that it may be easily read. A thermometer shall also be provided in a skimmer, or another easily accessible location.

B. A separate room shall be provided for the care and isolation of victims of injury, illness, or accident which is directly accessible from the pool deck. The room shall be well lighted and ventilated, and shall be large enough to permit unrestricted movement of both the victim and first-aid providers.

C. A direct dial, hard-wired telephone that is fully operational shall be provided within the swimming pool area. The phone shall be immediately accessible from the pool deck. The phone shall be located so a clear and unobstructed view of the pool(s) is provided. Emergency telephone numbers and the facility's name and address shall be posted by the telephone.

D. The depth of water in swimming pools shall be marked at every one foot increment of depth and at least every twenty feet of swimming pool perimeter on both the horizontal surface of the deck and the vertical surface of the pool wall. Horizontal depth markings shall be positioned to be read while standing on the deck facing the water. Depth markings on deck surfaces shall be non-slip. All numbers and letters shall be at least five inches in height and be of contrasting color with the pool walls and deck. Depth markings are not required for wading pools.

E. Fixed, floating, or moveable platforms in swimming pools shall be constructed with an air space of at least eighteen inches between the water surface and the underside of the platform or be provided with a barrier system at the perimeter of the device to prevent access under the device.

F. There shall be a minimum of one lifeguard stand provided for every 2,000 square feet of water surface area within the pool enclosure. Additional lifeguard stands may be required where, due to the configuration of the pool, full visibility is not provided from the installed lifeguard stand. Facilities with less than 2,000 square feet of water surface area shall not be required to provide an elevated lifeguard stand unless the director deems it necessary due to the configuration of the pool.

G. A transition line on the bottom of the pool and a floating life line shall be provided at the five-foot water depth between the shallow and deep portions of the swimming pool. The transition line shall be constructed of tile that is of dark and high contrasting color. The life line and transition line shall be located within six inches on either side of the break in slope to water greater than five feet in depth. The life line shall have clearly visible floats set at not greater than five-foot intervals. The transition line shall be a minimum of two inches wide. The life line shall be securely fastened to wall anchors of corrosion resistant materials which shall be recessed and shall have no projections into the pool. The line shall be of sufficient size and strength to offer a good handhold and support loads normally imposed by swimmers. The floating lifeline may be temporarily removed from the pool to facilitate lap swimming if:

1. There are no children in the pool not swimming laps,
2. There are no more than five adults in the pool not swimming laps and each has been informed by the lifeguard that the floating lifeline has been removed, and
3. The floating lifeline is immediately put back in place when lap swimming concludes.

H. There shall be no protrusions, extensions, means of entanglement, or obstructions which can cause entrapment or injury.

Sec. 11-11-49 **Disinfection Equipment.**

A. All swimming pools shall be provided with approved mechanically operated, positive displacement disinfectant feeding equipment, or other disinfection equipment approved by the Director, which:

1. shall be capable of providing a continuous and effective residual of disinfectant within the swimming pool water 24 hours per day;
2. shall have a design feed rate which will provide effective disinfection levels when the swimming pool is in peak demand conditions;
3. shall be capable of applying a dose the equivalent to maintain a concentration of at least 1 ppm free chlorine throughout the swimming pool at all times of operation .

B. The use of chlorine gas as a disinfectant shall not adversely affect the safety and health of patrons, pool personnel, or the public; shall comply with OSHA and City of Alexandria Fire Department requirements; and shall comply with the following:

1. Chlorine gas feeding equipment and chlorine gas cylinders shall be installed in a room separate from the filter room(s) and electrical panels and shall be equipped with a lockable door. Gas chlorinator rooms shall be equipped with a forced draft fan exhausting to the outside from the floor level. The exhaust fan shall provide a minimum of sixty air changes per hour. A fresh air inlet shall be provided near the ceiling. The gas chlorinator room shall be located above ground

level and below the deck level of all pools. The chlorine gas tanks shall be protected from direct sunlight and securely fastened in place during storage and use, and shall be mounted on a scale when in use. A self-contained gas mask for chlorine or a gas mask with a supply of oxygen under positive pressure or compressed air shall be provided at facilities where chlorine gas is utilized. The chlorine gas mask shall be approved by the Bureau of Mines and the City of Alexandria Fire Department. The gas mask shall be located accessible to, but outside of, the gas chlorinator room. The chlorinator shall be provided with an emergency cut-off device to prevent gas discharge or injection of gas during electrical outage. A gas chlorine detection device with an alarm shall be provided.

2. The use of gas chlorine as a disinfectant shall require a chemical feeder for the feeding of sodium carbonate into the recirculation system.

3. The use of gas chlorine as a disinfectant shall require that a supply of ammonia hydroxide be present for the checking of leaks in the chlorination system.

C. When the pool water recirculation system is equipped with an automatic chemical control mechanism that continuously analyzes the pool water and automatically activates chemical feeding, a water flow sensing device shall be provided that automatically deactivates all associated chemical feeders when the water flow in the recirculation system ceases.

D. When bromine is used as the disinfectant, the following shall be followed:

1. Bromine shall be fed on a continuous basis;

2. A concentration of at least 2 ppm bromine residual shall be maintained throughout the pool water at all times. A maximum of 4 ppm bromine residual shall be permitted in any swimming pool during use.

3. Solid stick or tablet type bromine shall be used with NSF certified commercial feed equipment.

E. Erosion feeders shall be equipped with a flow meter.

Sec. 11-11-50 **Fencing and Barriers.**

All outdoor pool areas shall be completely enclosed with a perimeter fence, or equivalent barrier, at least six feet in height, measured from the highest ground elevation within three feet adjacent to the outside of the barrier. If horizontal surfaces are used, top planes must be separated by a vertical distance that is no less than 45 inches and shall prohibit the passage of a sphere larger than 1.75 inches in diameter through any opening in the fence or barrier. The fence or barrier shall be non-climbable from the outside of the enclosure. Non-climbable shall mean no handholds, footholds, horizontal members, or other features that are available, which would aid in climbing the fence from outside of the barrier. There shall be no objects within a six-foot arc from the top of the perimeter fence or barrier and no closer than three feet to any part of the fence or barrier. The material used to construct the fence or barrier shall be approved by the Director. If the fence or barrier does not have horizontal surfaces, it shall be constructed so as to prohibit the passage of a sphere larger than four inches in diameter through any opening in or under the fence or barrier. Access gates installed in the perimeter fence or barrier shall have latches and locks at least 48 inches above the deck or ground surface. Emergency

gate(s) having a minimum horizontal opening of eight feet shall be provided for outdoor pools.

Where grassed areas are provided for patrons within the pool enclosure, they shall be separated from the pool deck by a three (3) foot high control fence or equivalent barrier except where the pool deck is at least fifteen feet wide.

Sec. 11-11-51 **Spectator Areas.**

Spectators at swimming or diving meets and other special events shall not have access to and shall be separated from the portions of the pool area used by swimmers or divers. Spectator balconies shall not overhang within five feet of any portion of the pool water surface.

Sec. 11-11-52 **Drinking Fountains.**

Each swimming facility shall have at least one source of cold potable water less than 75ºF readily accessible to all patrons within the pool facility.

Sec. 11-11-53 **Wading Pools.**

Wading pools shall meet all applicable requirements of this Ordinance, and the following additional requirements:

A. The slope of the bottom of any wading pool shall be no greater than 1 to 12 nor less than 1 to 40.

B. Wading pools shall be separated from any other swimming pool or spa pool by a fence approved by the Director. The fence shall be at least three feet in height with a self-latching, self-closing, three foot gate.

C. A separate recirculation system shall be provided exclusively for the wading pool.

D. Wading pool skimmers and main drain outlets shall be interconnected with equal diameter piping.

E. The distance from the deck to the water level shall be six inches or less.

Sec. 11-11-54 **Slides, Sprinklers, Fountains, Activity Pools and Other Pool Equipment.**

A. Slides, sprinklers, fountains, activity pools, and other pool equipment for which design standards are not contained in this Article shall meet the design standards in Article 6 of this Ordinance or shall meet design standards approved by the Director.

B. The construction of filter room shall meet the requirements of Sec. 11-11-38. The collector tank or reservoir shall be installed in accordance to manufacturer's specifications.

C. The disinfectant residual, pH, total alkalinity, and calcium hardness shall be continuously maintained within the minimum and maximum ranges specified in the table in 11-11-69 (c)(1).

Sec. 11-11-55 **Ventilation in Indoor Swimming Facilities**

Indoor swimming facilities shall be equipped with mechanical ventilation that provides for 0.5 cfm of outdoor air per square feet of pool and deck area.

ARTICLE 3. Swimming Pools; Operation and Maintenance

Sec. 11-11-56 **General Operation and Maintenance**

Swimming pool facilities shall be operated and maintained in a manner which will not create a nuisance or hazard to the public's safety or health. The pool shall be adequately secured to prevent unauthorized entry when not in use. Water in the pool and that standing on or in pool covers or other pool equipment shall at all times be treated in a manner to prevent the growth of algae and the breeding of mosquitoes or other insects.

Sec. 11-11-57 **Water Operating Levels.**

The water level shall be maintained within the operating range of the skimmers or at the top of the overflow rim of a gutter system at all times the swimming pool is open for use.

Sec. 11-11-58 **Monitoring, Reporting, and Record Keeping.**

The following information shall be recorded and maintained by the owner for a minimum of one year from the date of the recording, occurrence, or incident; and shall be available for inspection at all times while the swimming pool is in operation:

A. *Water Quality Parameters and Maintenance.*

1. The disinfectant residual and pH shall be tested and the results recorded at least once every two hours while the pool is in use. ORP readings, if applicable, shall also be recorded every two hours while the pool is in use. The water temperature, for heated pools, and the total chlorine residual, for pools utilizing chlorine, shall be tested and recorded a minimum of once a day.
2. Influent and effluent pressure gauge readings and the flow rate shall be observed every two hours and be recorded at least two times per day; at least once prior to opening to the public and during the last hour of operation. The date and time of each backwash or filter cleaning shall be recorded.
3. Total alkalinity and calcium hardness tests shall be performed and recorded weekly, or more often as necessary to provide proper chemical balance of the pool water. Cyanuric acid tests shall be performed and recorded weekly at all pools utilizing cyanuric acid or chlorinated cyanurates.
4. The date, time, type, and amount of any chemicals added to the pool water shall be recorded. However, for chemicals added continuously with a chemical feeder, only the type of chemical shall be documented.

B. *Other Records.*

1. The owner shall immediately notify the Director of all drownings, near drownings, injuries, water- related illness or deaths which have occurred. Notification of minor injuries, such as minor abrasions or superficial cuts, shall not be required. Owners shall submit a complete written drowning and injury report, containing all relevant facts and information related to the incident, to the Director within seven days of an incident. The following information must be included in the report of all drownings, near drownings, injuries, water-related illnesses, or deaths which have occurred:

a. Name of pool operator on duty at time of incident and their contact information;
b. Date, time and exact location of incident;
c. Name, age, certifications and contact information of persons responding during the incident;
d. Name and contact information for all lifeguards on duty at time of incident;
e. Exact locations of all lifeguards on duty;
f. Pool and/or spa water clarity;
g. Number of bathers in the pool;
h. Number of patrons in the facility;
i. Police Case number (if available);
j. Injury description;
k. Names of witnesses and their contact information; and
l. Detailed description of accident

2. Owners shall have available at the aquatic facility proof of the credentials, training, and/or certifications required for personnel as detailed in 11-11-10 and 11-11-63.

3. Material Safety Data Sheets (MSDS) for all chemicals used at a swimming pool facility shall be provided in a location readily accessible to all employees. MSDS shall not be located in the filter room and/or other rooms where chemicals are stored and/or used.

Sec. 11-11-59 **Placards.**

A. The water test results specified in Sec. 11-11-58(A)(1) shall be legibly and conspicuously posted on a permanent, water-proof, and durable placard in a location where it is readily observable by the patrons. The most recent required water quality test results, including the date and time of day tested, shall be posted. The minimum and maximum standards for these parameters, as specified in Sec. 11-11-69 Table III, shall be included on the placard. Water temperature shall also be posted for heated pools.

B. A conspicuously posted placard shall include the following statement: “This facility is inspected regularly by the Environmental Health Division of the Alexandria Health Department. They may be contacted at (703) 838-4400 or at www.alexhealth.com”.

C. Areas restricted to operating personnel only shall be prominently identified with a permanent, legible placard stating "Authorized Personnel Only" including, but not limited to, the filter and chemical storage rooms. The placards shall be conspicuously located on the exterior of the doors to the restricted areas.

D. A permanent, legible, placard(s) specifying facility rules and regulations regarding personal health and safety shall be posted in plain view of patrons within the facility.

E. A permanent, legible, engraved plastic or laminated paper specification placard shall be conspicuously displayed within the filter room(s) and shall be adequately lighted. The following information shall be included on the placard:

1. name and address of the facility;
2. volume in gallons of each pool or spa or water park feature;
3. water surface area in square feet of each pool or spa or water park feature;
4. minimum turnover time in hours of each pool or spa or water park feature;

5. minimum rate of flow in gallons per minute to provide the required turnover time of each pool or spa or water park feature; and

6. maximum facility load, and maximum pool load(s) of each pool or spa or water park feature.

F. Legible placards shall be posted in an appropriate location within the filter room(s) to describe the following pool operating procedures:

1. instructions on the proper operation of pumps and filters including the valve line-ups for filtration; and

2. instructions on proper backwashing or cleaning procedures and valve positions for backwashing.

G. A separate, permanent, legible placard clearly indicating the maximum facility load and individual swimming pool load(s) shall be conspicuously posted at the main entrance to the swimming pool facility. The letters and numbers indicating the load(s) shall be a minimum of 2 inches in height.

Sec. 11-11-60 **Precautions Relative to Communicable Disease.**

Any person having an obvious skin disease, nasal or ear discharge, inflamed eye, or any communicable disease with symptoms of diarrhea or vomiting shall be excluded from the facility. Any person with a chronic disease that may pose a hazard to other swimmers may be excluded from the facility by the Director.

Sec. 11-11-61 **Food Service.**

A. No area or physical facility for the preparation, service, or consumption of food and/or drinks may be located less than ten feet from the rim of a swimming pool.

B. Any area or physical facility for the preparation, service, or consumption of food or drinks shall be enclosed by a suitable fence or barrier.

C. A physical facility for the preparation, service, or consumption of food and/or drinks at a pool owned by a condominium association does not have to meet the requirements of Subsections A. and B. above if said facility is located at least twenty feet from the rim of the condominium swimming pool.

D. Any person engaged in eating or drinking shall remain in the area designated for the consumption of food and drink. However, at a condominium swimming pool, food and drink may be consumed up to the pool rim, but not in the swimming pool if the rules and regulations adopted by the condominium association allow it.

E. Water in an unbreakable plastic container is exempt from the requirements contained in Subsection D. above.

F. Glass containers are not permitted in the pool area.

Sec. 11-11-62 **Boisterous and Rough Play.**

Boisterous and/or rough play and running is prohibited at any swimming pool facility.

Sec. 11-11-63 **Lifeguards and Pool Operators.**

A. There shall be at least one lifeguard at all pool facilities. A minimum of one lifeguard shall be required pool-side for every 25 patrons or fraction thereof in the pool. Additional lifeguards may be required by the Director when deemed necessary for complete visual

coverage of the pool or when conditions exist that may compromise the health or safety of pool patrons. Waterparks shall be required to position lifeguards based on the recommendation of a national waterpark lifeguard accrediting institution, to include a system of zone management based on recognition time and response times. Additional lifeguards may be required by the Director when deemed necessary for complete visual coverage of the pool or when conditions exist that may compromise the health or safety of pool patrons. Lifeguards shall wear distinguishing emblems on their clothing clearly identifying them as lifeguards while on-duty.B. Lifeguards shall be at least fifteen years of age and shall be properly trained and certified in accordance with nationally recognized standards equivalent to or exceeding those set by the American Red Cross. Lifeguards shall also be trained and currently certified in cardio-pulmonary resuscitation in accordance with national standards equivalent to or exceeding those set by the American Red Cross. It is the responsibility of each training organization that issues lifeguard and/or CPR certifications to insure that the course standards are equivalent to or exceed those set by the American Red Cross. Waterpark lifeguards shall be required to attend a minimum of four hours of in-service training per month covering such specific operational aspects as guest service, scanning & vigilance techniques, safe water entry/exit, incident recognition, and rescue procedures, plus physical conditioning drills. Waterpark lifeguards will also be subject to performance audits from their accrediting institution and participate in emergency simulations, including periodic practice with local first-response authorities.

Lifeguards shall have their original document of current certification and valid photo identification at the pool facility during operation of the pool facility.

C. In order to maintain the level of alertness and vigilance necessary for lifeguarding, lifeguards shall be required to take a continuous ten minute break after every 50 minutes of continuous lifeguarding and a continuous thirty-minute break after four hours of lifeguarding . If a lifeguard is not stationed poolside during this break period, all patrons shall remain out of the pool.

D. Lifeguards shall not be subject to, or engage in, duties that would distract their attention from the proper observation of patrons in the pool area or that would prevent immediate assistance to patrons in distress.

E. The Director may require lifeguards to demonstrate skills through verbal questioning, written questions, and/or active demonstration. These skills include, but are not limited to, the following:

1. Ability to swim two pool lengths,
2. Knowledge of basic lifesaving skills as taught in Red Cross lifeguarding courses,
3. Knowledge of CPR, and
4. Knowledge of how and when to report accidents, injuries, near drownings, and deaths.

F. The Director may require pool operators to demonstrate skills through verbal questioning, written questions, and/or active demonstration. These skills include, but are not limited to, the following:

1. Knowledge of how to handle a fecal contamination incident,
2. Ability to conduct water quality tests of the pool as required in Sec. 11-11-58,

3. Knowledge of how and when to backwash the filters,
4. Knowledge of what the required water chemistry parameters are contained in 11-11-69,
5. Knowledge of how to adjust the disinfectant and pH levels of the pool, and
6. Knowledge of what health or safety conditions should cause a swimming pool to be immediately closed to the public.

Sec. 11-11-64 **Safety and Rescue Equipment; Other Safety Features.**

A. Every swimming pool facility shall be equipped with the following readily accessible safety and rescue aids:

1. A minimum of one rescue tube shall be provided immediately adjacent to each lifeguard stationed poolside. The rescue tube shall measure at least 45 inches in length and shall provide adequate buoyancy to keep two persons afloat in the water.
2. An approved first aid kit, which meets OSHA First Aid 29 CFR 1910.151 standards, shall be readily available. The kit shall meet the minimum requirements of generic first aid kits according to the American National Standards Institute (ANSI) Z308.1-1978.
3. A full-length backboard with straps shall be provided. The backboard shall be buoyant, and capable of supporting a minimum of 350 pounds, center loaded, with minimal deflection. The backboard shall have an impervious surface and be provided with runners, numerous hand/strap holes, and a minimum of three backboard straps.
4. Provide one or more light, but strong, nontelescopic poles with blunted ends not less than twelve feet in length including a body hook.
5. A blood-borne pathogen kit which meets OSHA 29 CFR 1910.1030(d)(3)(i) standards shall be provided.
6. Each lifeguard shall be equipped with a CPR pocket mask.

B. *Other Safety Features.*

1. The room designated for emergency care of casualties shall, at a minimum, be equipped with an approved first aid kit, a cot, and two blankets. Filter or chemical storage rooms shall not be used as emergency care rooms.
2. All chemicals associated with the facility shall be stored and utilized in a safe and approved manner in accordance with manufacturer's recommendations. Incompatible chemicals shall not be stored in close proximity to each other. Cleaning chemicals and supplies shall be stored in a safe manner, separate from swimming pool chemicals. Chemicals shall be stored in properly labeled containers which shall be kept covered at all times.
3. Chemical vats shall be covered with proper lids and shall be provided with an approved means of secondary containment such as an outer spill control container or a spill pallet adequate in size and capacity to contain spills and leaks.
4. Protective equipment, including but not limited to goggles or full face shields; neoprene rubber gloves; and rubber aprons shall be provided and used by personnel handling hazardous chemical compounds.
5. Plugs or caps shall be installed at all pool suction cleaner outlet ports when the suction cleaner is not in use. The main valve controlling the water flow from the

pool suction cleaner outlet ports shall be closed when the pool suction cleaner is not in use.

6. All safety equipment and features required in this Ordinance shall be maintained in good condition and repair.

7. Pool water temperature shall not exceed 104 degrees Fahrenheit.

8. Safety signs shall be displayed in a prominent location warning against diving into water less than five feet deep without specific supervision. The letterings of the safety signs must be a minimum of five inches in height.

9. Outdoor swimming pool facilities and indoor swimming pool facilities with windows overlooking the pool shall close for 30 minutes following thunder or lightning.

Sec. 11-11-65 **Laundering.**

Bathing suits, towels and other reusable materials furnished by a swimming pool facility shall be properly cleaned or laundered and disinfected before being issued to patrons.

Sec. 11-11-66 **Water contamination**

A. The following information shall be posted at the entrance of every pool:

1. If you have or have had diarrhea in the past two weeks, please do not use the pool.
2. Shower your child and yourself before entering the pool or after using the toilet.
3. Bathers who are not toilet trained or who are incontinent must wear a swim diaper.
4. Do not drink pool water.

B. The introduction of body waste including sputum or vomitus, into a pool is prohibited. Patrons wearing cloth or disposable diapers are prohibited from entering the pool water. A pool contaminated by human feces or vomit shall be cleared immediately. The following actions shall be taken prior to reopening the pool:

1. In the event of well-formed stool or vomitus contamination:
    a. Clear the pool of all patrons;
    b. Remove as much of the contaminating material as possible using a net or scoop. Vacuuming is not permitted unless it discharges directly to waste;
    c. Raise the pool chlorine level to a minimum of 3.0 ppm for at least twenty minutes;
    d. Adjust the pH of the pool water to a level of 7.5 or less; and
    e. Prohibit patrons from entering the pool for at least twenty minutes after the chlorine level reaches 3.0 ppm.
2. In the event of diarrheal contamination:
    a. Clear the pool of all patrons;
    b. Remove as much contaminating material as possible from the water using a net or scoop. Vacuuming is not permitted unless it discharges directly to waste;

c. Raise the pool chlorine level to a minimum of 40 ppm for 6.5 hours or twenty ppm for 13.0 hours.

d. Adjust the pH of the pool water to a level of 7.5 or less;;

e. Prohibit patrons from entering the pool during the time period specified in (c); and

d. Achieve acceptable disinfectant residuals and chemical balance as specified in Sec. 11-11-69 Table III. Chemical Water Quality Standards for Swimming Pools prior to allowing patrons to enter the pool.

3. Pools using stabilizer should follow these steps in the event of diarrheal contamination:

a. Clear the pool of all patrons;

b. Remove as much of the contaminating material as possible from the pool water. Vacuuming is not permitted unless it discharges directly to waste;

c. Raise pool disinfectant level to a minimum of 40 ppm and adjust pH to a level of 6.5 or less for 48 hours;

d. Patrons are prohibited from entering the pool during this time period; and

e. Achieve acceptable disinfectant residuals and chemical balance as specified in Sec. 11-11-69 Table III. Chemical Water Quality Standards for Swimming Pools prior to allowing patrons to enter the pool.

4. The Director shall be notified within 1 hour if the pool is contaminated with feces and/or vomit.

5. The instructions in 11-11-66 B shall be maintained on site in alocation that is easily accessible to the pool operator..

6. In the event that CDC recommends a longer contact time, the CDC recommendation should be followed.

Sec. 11-11-67 **Deck contamination**

A. In the event that body fluids such as blood, vomit, or feces contaminate the deck, the following procedures shall be followed:

1. Block off the area of the spill from patrons until clean-up and disinfection is complete
2. Put on disposable latex gloves to prevent contamination of hands.
3. Wipe up the spill using paper towels or absorbent material and place in a plastic garbage bag.
4. Gently pour bleach solution (5,000 ppm) onto all contaminated areas of the surface.
5. Let the bleach solution remain on the contaminated area for twenty minutes.
6. Wipe up the remaining bleach solution.
7. All non-disposable cleaning materials used such as mops and scrub brushes should be disinfected by saturating with bleach solution and air dried.
8. Remove gloves and place in plastic garbage bag with all soiled cleaning materials.
9. Double-bag and securely tie-up plastic garbage bags and discard.
10 .Thoroughly wash hands with soap and water.

B. In the event that vomitus or fecal contamination contaminating the deck enters the pool, the pool operator shall follow the procedures in Sec. 11-11-66 (B).

Sec. 11-11-68 **Water Clarity.**

When a swimming pool is open for use, the water shall be considered sufficiently clear when the main drain grates are clearly visible.

Sec. 11-11-69 **Water Treatment and Test Equipment.**

A. The following chemicals may be used to treat swimming pool water: aluminum sulfate, calcium chloride, calcium hypochlorite, carbon dioxide, cyanuric acid, lime, muriatic acid, polyaluminum chloride, sodium bicarbonate, sodium bisulfate, sodium carbonate, sodium hypochlorite, sodium thiosulphate, approved algaecides, approved bromine compounds, and approved chelating, sequestering, and clarifying agents. No other chemicals shall be used to treat swimming pool water without prior written authorization from the Director.

B. Aluminum sulfate and polyaluminum chloride shall not be fed continuously into a recirculation system using rapid sand filters. Formation of the floc shall be achieved separately and applied directly to the filter influent during the rewash and continuing into the early part of the filter cycle.

C. Chemical water quality standards for swimming pools, except for pools that use Cyanuric acid or chlorinated cyanurates, shall be as follows:

1. Except as noted below, disinfectant residual, pH, total alkalinity, and calcium hardness shall be continuously maintained within the minimum and maximum ranges specified in Table III. If the swimming pool is equipped with automatic chemical controllers utilizing ORP measurements, ORP shall be maintained within the ranges specified in Table III. Disinfectant residual limits specified in Table III may be exceeded in pools with automatic chemical controllers, which utilize ORP measurements and continually analyze and automatically control pH and the disinfectant residual, only if necessary to maintain the ORP specified in Table III. However, the disinfectant residual shall not exceed 5 ppm in such pools. The use of ORP sensing equipment does not eliminate the requirement for routine water testing specified in Sec. 11-11-58. Disinfectant residual limits specified in Table III may be exceeded when superchlorinating a swimming pool provided that no patrons are present in the swimming pool water and that the disinfectant level is returned to the acceptable range prior to allowing patrons to enter the swimming pool water.

Table III. Chemical Water Quality Standards for Swimming Pools
TABLE INSET:

Parameter	Minimum	Ideal	Maximum
Outdoor Pool Free Chlorine Residual (ppm)	1.0	2.0	5.0
Indoor Pool Free Chlorine Residual (ppm)	1.0	2.0	5.0
Combined Chlorine Residual (ppm)	0.0	0.0	0.2
Bromine Residual (ppm)	2.0	3.0	4.0
Oxidation Reduction Potential (ORP) (millivolts)	650	750 - 900	N/A
pH	7.2	7.4 - 7.6	7.8
Total Alkalinity (ppm)	60	80 - 120	180
Calcium Hardness (ppm)	150	200 - 400	1000
Total Dissolved Solids	0		1600

2. Except as noted in Sec. 11-11-69(C)(1) &(D), disinfectant residuals shall be maintained within the ranges specified in Table III, 24 hours per day, through the use of automatic disinfection equipment specified in Sec. 11-11-49. For swimming pools that backwash/clean filters to storm drains, streams, lakes or other bodies of water, disinfectant levels may be temporarily reduced immediately prior to the backwashing/cleaning of filters, provided the swimming pool facility is not open for patron use.

D. If Cyanuric acid or chlorinated cyanurates is used in an outdoor swimming pool, the Cyanuric acid levels and disinfectant residuals shall be maintained within the following ranges:

1. A free chlorine residual of at least 2 ppm shall be maintained for Cyanuric acid levels from 0 to 50 ppm.
2. The concentration of Cyanuric acid shall not exceed 50 ppm.
3. The use of Cyanuric acid or other chlorine stabilizers is prohibited in indoor swimming pools.

E. An approved water quality test kit for determining free and total chlorine or total bromine residuals, pH, total alkalinity, and calcium hardness shall be provided and maintained. Provisions shall be made for checking superchlorination levels. Diethyl-p-phenylene diamine (DPD), or other testing reagent approved by the Director, is required for determining free halogen residual. If another disinfectant has been approved by the Director for use at a swimming pool, an appropriate test kit approved by the Director shall be provided and maintained. A test kit for measuring the concentration of Cyanuric acid, accurate within 5 ppm, shall be provided at each swimming pool using Cyanuric acid or chlorinated cyanurates.

F. Hand-feeding of chemicals shall not be permitted during hours of operation or within thirty minutes prior to opening.

Sec. 11-11-70 **Design Load.**

The maximum individual swimming pool bather load shall be determined by dividing the total water surface area in square feet of each swimming pool within the swimming pool facility by 27 square feet. The designated maximum individual swimming pool bather load and the maximum facility load shall not be exceeded. The pool operator shall be responsible for enforcing the maximum individual swimming pool bather load and the maximum facility load. The maximum facility load may be temporarily exceeded to allow for spectators of special events, such as recreational swimming meets or other water sport activities, provided that the spectators shall not have access to and shall be separated from the pool(s) both during and after the event.

Sec. 11-11-71 **Spectators.**

No person in street shoes shall be allowed on the deck of a swimming pool within five feet of the pool edge. Exceptions may be made for participants and spectators of swimming meets or other water sport activities, operating personnel, personnel engaged in repair work or the Director.

ARTICLE 4. Spa Pools; Design and Construction

Sec. 11-11-72 **Location.**

The location of a spa pool shall in no way hinder the operations for which it is designed, nor adversely affect patron safety or water quality.

Sec. 11-11-73 **Access.**

Direct and unobstructed access to any spa pool area shall be provided as specified in Sec. 11-11-28(A). Emergency access to indoor or elevated spa pools shall be provided as specified in Sec. 11-11-28(B).

Sec. 11-11-74 **Construction Materials.**

Spa pools shall be constructed of materials specified in Sec. 11-11-29.

Sec. 11-11-75 **Design.**

Subject to the provisions below, a spa pool may be of any dimension or shape, provided that satisfactory recirculation of water can be obtained and that no undue hazards to patrons are created. The dimension or shape shall comply with the following specifications:

A. The maximum water depth shall be four feet measured from the water line.

B. The maximum depth of any seat or sitting bench shall not be more than 24 inches below the water line.

C. All corners shall be coved as specified in Sec. 11-11-33.

D. The slope of the floor shall not exceed a ratio of 1 to 12.

Sec. 11-11-76 **Hydrostatic Pressure Relief Valve.**

Hydrostatic pressure relief valves shall be installed as specified in Sec. 11-11-31 unless it can be demonstrated that the spa pool will not be displaced by hydrostatic pressure.

Sec. 11-11-77 **Handholds.**

Spa pools shall be provided with suitable handholds as specified in Sec. 11-11-35.

Sec. 11-11-78 **Stairs and Bench Seats.**

A. Spa pool stairs shall be provided where water depths are greater than 24 inches.

B. The design and construction of spa pool stairs and bench seats shall conform to the following specifications:

1. Step treads shall have a minimum unobstructed horizontal depth of ten inches and a minimum continuous width of 24 inches.
2. Riser heights shall not be less than seven inches nor greater than twelve inches. The bottom tread shall not serve as a bench or seat.
3. Each set of stairs shall be provided with a minimum of one handrail to fully service all treads and risers.
4. The top and leading edge of all stair treads shall be marked on the horizontal surface as specified in Sec. 11-11-36(B)(3).
5. The step treads of all stairs shall be of non-slip construction.
6. A minimum of one means of egress shall be provided for spa pools with a perimeter of fifty feet or less. One additional means of egress shall be provided for each additional fifty feet of spa pool perimeter, or fraction thereof. Additional means of egress may be required as determined by the Director. The location of the means of egress shall be determined by the design of the spa pool.

Sec. 11-11-79 **Decks.**

All spa pools shall have a continuous deck, at least five feet in width, extending around at least fifty percent of the spa pool. Except as provided above, decks shall comply with the requirements specified in Sec. 11-11-46.

Sec. 11-11-80 **Lighting.**

Lighting shall be provided according to all applicable specifications of Sec. 11-11-47.

Sec. 11-11-81 **Safety Requirements.**

A. Spa pool depth markings shall comply with the requirements specified in Sec. 11-11-48(D).

B. There shall be no protrusions, extensions, means of entanglement or obstructions which can cause entrapment or injury.

C. A timer switch that automatically shuts off the hydrotherapy jets and air blowers shall be provided. The timer switch shall be readily accessible to patrons and be located directly adjacent to the spa pool and shall have a maximum setting which does not exceed fifteen minutes. The timer switch shall not be accessible from within the spa pool.

D. A prominently identified and conspicuously located spa pool emergency pump cut-off switch shall be provided at each spa pool to be used strictly in the event of an

emergency. The emergency switch shall deactivate all spa pool pumps. An "EMERGENCY PUMP CUT-OFF SWITCH" sign shall be posted at the switch, and shall have letters at least two inches in height which are color contrasted with the background color of the sign. The emergency pump cut-off switch shall not be capable of activating the spa pool pumps.

1. The switch shall be located no more than 25 feet from the edge of the spa pool and shall be located in the same room or enclosure.

E. A telephone shall be provided as specified in Sec. 11-11-48(C). The facility's name, address, and the emergency numbers, including the phone number for the pool operator, shall be posted by the telephone.

F. No spa patron shall be permitted in the spa pool area alone.

Sec. 11-11-82 **Fencing and Barriers.**

Fencing and barriers shall be provided as specified in Sec. 11-11-50. In addition, for indoor spa pool facilities, locked doors or an equivalent barrier acceptable to the Director shall be provided to prevent the entry of unauthorized individuals.

Sec. 11-11-83 **Drinking Fountains.**

Each spa pool facility shall have at least one source of cold potable water readily accessible to all patrons.

Sec. 11-11-84 **Inlets, Outlets, Piping, Drains, and Skimmers.**

A. Spa pool inlets and outlets shall be provided and arranged to maintain a uniform circulation of water and disinfectant residual.

B. All spa pool piping shall comply with the requirements specified in Sec. 11-11-41, except only subsurface spa pool piping which is not integrally included in the manufacture of the spa pool shall be embedded in and covered with sand or an approved equivalent.

C. All spa pools shall be provided with a minimum of one skimmer. Spa pool skimmers shall comply with the requirements specified in Sec. 11-11-45(B).

D. Spa pool suction outlets shall be designed so that each pumping system in the spa pool provides one of the following alternatives:

1. Two or more interconnected suction outlets. The system shall be designed so that none of the outlets can be isolated from the suction line by a valve or by any other means. All piping associated with the suction outlets shall be of equal diameter and each suction outlet shall be of equal size. Suction outlets and associated piping shall be hydraulically designed to provide equal flow through each suction outlet. The open area of the suction outlets shall be covered with suitable protective grates or covers that are anchored using manufacturer supplied parts in strict accordance with the manufacturer's specifications and recommendations and shall be designed to prevent body entrapment or injury. The suction outlet covers shall be secured so that their removal requires the use of tools. Suction outlet covers shall be manufactured and installed according to the latest specifications set forth by the ASME/ANSI and NSF standards for suction fittings. The cover, frame and all components shall be corrosion resistant and shall be designed to withstand the maximum anticipated forces generated by active use.

If the suction outlets are main drain outlets, they shall have anti-vortex covers or grates, shall be located in the deepest part of the spa pool, and shall be capable of draining the pool. The total water velocity through suction outlets, with the exception of skimmers, shall not exceed one foot per second and shall not exceed the maximum flow rate specified by the manufacturer of the suction outlet cover.

2. Other methods that prevent suction outlet body entrapment or injury may be approved by the Director.

3. The design of a main drain outlet or outlets, and the components of main drains outlets shall comply with ANSI/ASME A112.19.8-2007.

4. The water velocity through a main drain outlet shall not exceed the maximum water velocity specified by the manufacturer. The maximum flow rate possible at the manufacturer's specified velocity shall meet or exceed the total system flow.

E. If fill spouts are used at spa pools, they shall be installed according to applicable requirements specified in Sec. 11-11-41(B).

Sec. 11-11-85 **Recirculation System.**

A. All spa pools shall be equipped with a recirculation system consisting of at least a pump, connecting piping, fittings, valves, a filter, disinfecting equipment, necessary pipe connections to the inlets and outlets, skimmer(s) and main drains.

B. The recirculation system shall be designed for maximum turnover time of fifteen minutes.

C. Adequate provision shall be made for backwashing or cleaning the filters.

D. A separate recirculation system shall be provided for each spa pool.

Sec. 11-11-86 **Filters and Gauges.**

A. The recirculation system of a spa pool shall be equipped with a filtration system that will filter the entire volume of the spa pool at the rate specified in Sec. 11-11-85(B).

B. Only high-rate sand, diatomaceous earth or replaceable cartridge filters shall be used for spa pools. Other filtration systems may be used with the approval of the Director. Except as provided above, filters and associated piping and valves shall comply with the requirements specified in Sec. 11-11-39(A).

C. Pressure gauges and flow meters shall be installed as specified in Sec. 11-11-39(B).

D. When cartridge filters are used, an extra set of cartridge filters shall be on-site.

Sec. 11-11-87 **Pumps and Strainers.**

A pump(s) shall be provided with adequate capacity to recirculate the spa pool water at the rate specified Sec. 11-11-85(B). Pump(s) and strainer(s) shall meet the requirements specified in Sec. 11-11-40(A) and (B), except the turnover time specified in Sec. 11-11-85(B) shall be achieved.

Sec. 11-11-88 **Filter Room.**

A filter room(s) shall be provided which meets the requirements specified in Sec. 11-11-38.

Sec. 11-11-89 **Air induction Systems.**

A. An air induction system, when provided, shall prevent water back-up that could cause electrical shock hazards.
B. Air intake sources shall be positioned to minimize introduction of contaminants, such as deck water and dirt, into the spa pool.
C. Integral air passages shall be pressure tested at 1½ times the intended working pressure during the time of installation to ensure airtight integrity.

Sec. 11-11-90 **Disinfection Equipment.**
A. All spa pools shall be provided with disinfection equipment meeting the requirements specified in Sec. 11-11-49(A) and (C).
B. Chlorine gas shall not be used as a disinfectant in spa pools.

Sec. 11-11-91 **Ventilation in Indoor Spa Facilities**
Indoor spa facilities shall be equipped with mechanical ventilation that provides for 0.5 cfm of outdoor air per square feet of spa pool and deck area.

ARTICLE 5. Spa Pools; Operation and Maintenance

Sec. 11-11-92 **General Operation and Maintenance.**
Spa pool facilities shall be operated and maintained as specified in Sec. 11-11-56.

Sec. 11-11-93 **Water Operating Levels.**
The water level shall be maintained within the operating range of the skimmer or at the top of the overflow rim of a gutter system at all times.

Sec. 11-11-94 **Monitoring, Reporting, and Record Keeping.**
Spa pool water testing shall be performed as specified in Sec. 11-11-58. In addition, the dates and times the spa pool is drained and cleaned shall be recorded.

Sec. 11-11-95 **Placards.**
Placards shall be provided as specified in Sec. 11-11-59.

Sec. 11-11-96 **Precautions Relative to Communicable Disease.**
Precautions relative to communicable disease specified in Sec. 11-11-60 shall be enforced.

Sec. 11-11-97 **Food Service.**
Food service shall be limited as specified is Sec. 11-11-61

Sec. 11-11-98 **Boisterous and rough play.**
Boisterous and/or rough play and running at any spa pool facility is prohibited.

Sec. 11-11-99 **Temperature Requirements.**
Spa pool water temperature shall not exceed 104 degrees Fahrenheit. A thermostat shall be provided for the control of the spa pool water temperature. A thermometer shall

be provided in the heater effluent line. An accurate, impact resistant spa pool thermometer shall be kept in each spa pool for measuring water temperature.

Sec. 11-11-100 **Safety and Rescue Equipment; Other Safety Features.**

A. Every spa pool facility shall be equipped with the following readily accessible safety and rescue aids:

1. An approved first aid kit, which meets OSHA First Aid 29 CFR 1910.151 standards, shall be readily available. The kit shall meet the minimum requirements of generic first aid kits according to the American National Standards Institute (ANSI) Z308.1-1978.
2. A full-length backboard shall be provided as specified in Sec. 11-11-64(A)(3).
3. A working clock shall be provided which is clearly visible from within the spa pool.
4. A blood-borne pathogen kit which meets OSHA 29 CFR 1910.1030(d)(3)(i) standards.

B. Other safety features:

1. The following recommendations for safe use of the spa shall be posted at the entrance of every spa pool:
    a. Do not use spa alone.
    b. Pregnant women, elderly persons and persons suffering from heart disease, diabetes or abnormal blood pressure or other at-risk persons should not enter the spa pool without consulting a physician.
    c. Do not use the spa pool while under the influence of alcohol, tranquilizers, or other drugs which may cause drowsiness, alter blood pressure or put the patron at risk.
    d. Do not use at water temperatures above 104 degrees Fahrenheit.
    e. Unsupervised use by children is prohibited.
    f. Enter and exit slowly.
    g. Limit your use of the spa pool to a maximum of fifteen minutes at one time.
    h. Cool down before revisiting.
    i. Long exposure may result in nausea, dehydration, dizziness, fainting or death.
    j. The use of oils, body lotions and mineral bath salts is prohibited.
    k. Patrons with symptoms of a communicable disease are prohibited from entering the spa pool.
    l. Failure to comply with these regulations constitutes grounds for exclusion from the premises or management action as necessary.
2. All chemicals associated with spa pools shall be stored and utilized in a safe and approved manner as specified in Sec. 11-11-64(B)(2).
3. Protective equipment shall be provided for handling hazardous chemicals as specified in Sec. 11-11-64 (B)(4).
4. Filter and chemical storage rooms shall be locked at all times when authorized personnel are not present.
5. Outdoor spa pool facilities and indoor spa pool facilities with windows overlooking the pool shall close for 30 minutes following thunder or lightning.

Sec. 11-11-101 **Laundering.**

Bathing suits, towels and other reusable materials furnished by a spa pool facility shall be properly cleaned or laundered and disinfected before being issued to patrons.

Sec. 11-11-102 **Water Clarity.**

When a spa pool is open for use, the water shall be considered sufficiently clear when the main drain grates are clearly visible when jets are off. .

Sec. 11-11-103 **Water Treatment and Test Equipment.**

A. No chemicals other than those specified in Sec. 11-11-69(A) shall be used to treat spa pool water without written authorization from the Director.

B. Except as noted below and in Sec. 11-11-103 C, disinfectant residual, pH, total alkalinity, and calcium hardness shall be continuously maintained within the minimum and maximum ranges specified in Table IV. If the spa pool is equipped with automatic chemical controllers utilizing ORP measurements, ORP shall be maintained within the ranges specified in Table IV. Disinfectant residual limits specified in Table IV may be exceeded in pools with automatic chemical controllers, which utilize ORP measurements and continually analyze and automatically control pH and the disinfectant residual, only if necessary to maintain the ORP specified in Table IV. However, the disinfectant residual shall not exceed 10 ppm in such spa pools. The use of ORP sensing equipment does not eliminate the requirement for routine water testing specified in Sec. 11-11-94. Disinfectant residual limits specified in Table IV may be exceeded when superchlorinating a spa pool provided that no patrons are present in the spa pool water and that the disinfectant level is returned to the acceptable range prior to allowing patrons to enter the spa pool water.

Table IV. Chemical Water Quality Standards for Spa Pools.

TABLE INSET:

Parameter	Minimum	Ideal	Maximum
Free Chlorine Residual (ppm)	2.0	3.0 – 4.0	10.0
Combined Chlorine Residual (ppm)	0.0	0.0	0.2
Bromine Residual (ppm)	2.0	3.0 – 5.0	6.0
Oxidation Reduction Potential (ORP) (millivolts)	650	750 - 900	N/A
pH	7.2	7.4 - 7.6	7.8
Total Alkalinity (ppm)	60	80 - 120	180
Calcium Hardness (ppm)	150	200 - 400	1000
Total Dissolved Solids (ppm)	0		1600

C. If cyanuric acid or chlorinated cyanurates are used in an outdoor spa pool, the cyanuric acid levels and disinfectant residuals shall be maintained within the following ranges:

1. A free chlorine residual of at least 4 ppm shall be maintained for cyanuric acid levels from 0 to 50 ppm. The concentration of cyanuric acid shall not exceed 50 ppm. The use of cyanuric acid or other chlorine stabilizers is prohibited in indoor spa pools.

D. An approved water quality test kit shall be provided as specified in Sec. 11-11-69(E).

E. Hand-feeding of chemicals shall not be permitted while the spa pool is open or accessible to patrons and within thirty minutes of opening.

Sec. 11-11-104 **Water Contamination.**

The introduction of body wastes, including sputum or vomitus, into a spa pool is prohibited. A spa pool contaminated by human feces or vomit shall be closed immediately and the following additional actions shall be taken by the spa pool operator:

A. Remove the contaminating material from the pool water.

B. Backwash the filters.

C. Drain the spa pool.

D. Clean and disinfect the bottom and sidewalls of the spa pool and skimmers.

E. Refill with potable water.

Sec. 11-11-105 **Deck Contamination.**

A. In the event that body fluids such as blood, vomit, or feces contaminate the deck, follow the procedures indicated in Sec. 11-11-67(A).

B. In the event that vomitus or fecal contaminating the deck enters the pool, the operator shall follow the procedures indicated in Sec. 11-11-103.

Sec. 11-11-106 **Posting of Water Quality Test Results and Water Quality Standards.**

The water tests indicated in Sec. 11-11-94 shall be conducted and the results posted as specified in Sec. 11-11-59(A).

Sec. 11-11-107 **Design Load.**

The maximum individual spa pool bather load shall be calculated by dividing the total water surface area in square feet of each spa within the spa pool facility by ten square feet or shall be determined by the Director at the time of construction. The designated maximum individual spa pool bather load and the maximum facility load shall not be exceeded. The pool operator shall be responsible for enforcing the maximum individual spa pool bather load and the maximum facility load.

ARTICLE 6. Waterpark Facilities; Design, Construction, Operation, and Maintenance

Sec. 11-11-108 **Scope.**

This Article addresses the special design, construction, operation and maintenance considerations unique to waterpark facilities.

Sec. 11-11-109 **Design.**

A. Waterpark facilities shall meet or exceed the following design and construction standards in effect at the time of construction, including but not limited to:

1. Specifications contained in this Ordinance.
2. ASTM F-24 "Standards on Amusement Rides and Devices."
3. "Virginia Amusement Device Regulations."
4. Industry standards and manufacturer's specifications and recommendations.

B. The proposed design shall be reviewed and approved by a licensed engineer.

C. Waterpark facilities shall be designed to provide for the safety of the patron and proper recirculation of the waterpark facility's water. The design shall include, but not be limited to the following:

1. Absence of protrusions, pinch hazards, extensions, means of entanglement, or other obstructions which can cause entrapment or injury.
2. Construction tolerances conforming with ANSI public pool standards.

D. A report, prepared by a licensed engineer, that certifies the design of the waterpark facility is consistent with accepted safety engineering practices, industry standards, manufacturer's specifications and recommendations, and this Ordinance, shall be included with the original plans and specifications submitted to the Director for review.

1. The report shall address issues related to safety design, including the ergonomic aspects of biomechanics for waterpark facilities.
2. The report shall substantiate that a comprehensive risk analysis was made of the waterpark, including a risk analysis of each separate component and of the components interaction with other elements of the water park.
3. The report shall demonstrate that the waterpark design protects the patron, under foreseeable conditions and normal usage and behavior, from exposure to injury. Elements to be considered include, but are not limited to, the following:
    a. The activity shall contain the patron.
    b. The activity shall provide clear and smooth passage of the patron.
    c. The activity shall maintain designed patron speeds.
    d. The activity shall provide smooth transitions in speed and direction.
    e. The activity shall provide for safe landing and/or disembarkation of the patron.
    f. The activity shall accommodate continuous patron surveillance by lifeguards and attendants, except for an enclosed, tubular chute or flume where the patron shall be monitored at the points of entry and exit by qualified operation personnel.
4. The report shall specify the maximum pool loads and the maximum facility load.
5. The report shall be accompanied by a facility operation and maintenance manual which includes manufacturer's specifications and recommendations for each attraction regarding operation and maintenance of the attraction to include, but not be limited to, the following:
    a. Appropriate construction drawings.
    b. Maintenance instructions.
    c. Operation instructions.

d. Staffing requirements and procedures.

e. Instructional and warning signage.

6. Upon completion of the waterpark facility and prior to issuance of the owner's seasonal or annual permit, an addendum to the report, prepared by a licensed engineer, shall be submitted to the Director. The report addendum shall certify that each attraction has been tested under normal operating conditions and found to perform satisfactorily. The Director may require that the testing procedure be witnessed by one or more designees of the Director. The addendum shall also certify that the waterpark facility was constructed as detailed in the plans and specifications approved by the Director and consistent with accepted safety engineering practices, industry standards, manufacturer's specifications and recommendations, the report described in Sec. 11-11-108(D) and this Ordinance.

E. The following specific types of waterpark facility attractions shall comply with the requirements indicated:

1. Water chutes or flumes and inner-tube rides shall be provided with:

a. Control of unauthorized patron access at entry and exit areas, and points along the attraction not designed for entry or exit.

b. Handrails and non-slip walking surfaces at attraction entry and exit areas.

c. Attendant stations for patron control that have direct line of sight between the entry and exit area of each attraction except as provided in Sec. 11-11-108(D)(3)(f). Additional attendant stations may be required by the Director to provide complete visual coverage of the attraction.

d. An effective internal communication system that allows direct communication between the attendants stationed at the entry areas, exit areas, and/or additional locations along the attraction as necessary.

e. All structure supported attractions shall be designed to prevent water leaks, discharge, and splashout to minimize or eliminate structural deterioration, under structure erosion, loss of structural support or other safety hazards.

f. Instruments shall be provided to measure the flow of water through each attraction.

g. Any tethered attractions shall not pose a pinch, puncture, or any other safety hazard.

2. Receiving pools shall have the minimum clearances detailed in Figure II for flume or chute entrances into pools. Sufficient distance shall be provided between the flumes or chutes to prevent collision. Receiving pools shall also meet the following requirements:

a. The flume or chute sliding surface of waterslides shall end at or below the pool operating water level.

b. The flume or chute shall be perpendicular to the wall of entry for a minimum of ten feet.

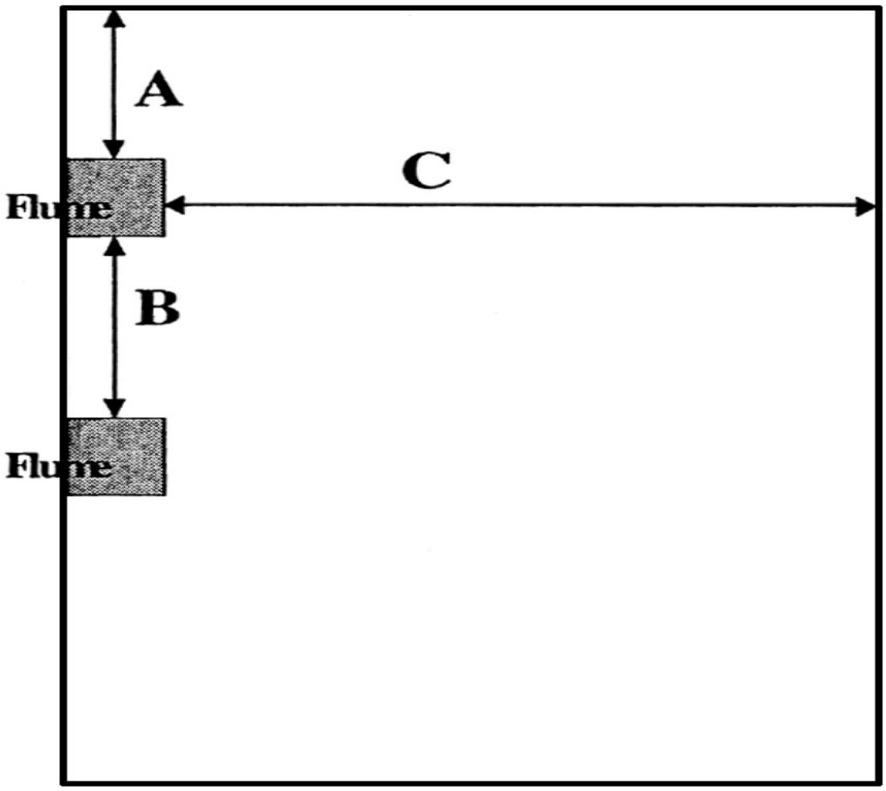
c. Receiving pools for drop slides shall comply with the manufacturer's specifications and recommendations.

Figure II: Minimum Clearances for Flume or Chute Entry to Receiving Pools.

TABLE INSET:

Value	Minimum Distance	Description
A	5 Feet	Minimum distance from edge of flume to side of pool
B	6 Feet	Minimum distance between edges of parallel flumes
C	20 Feet	Minimum distance from where flume terminates to opposite side of pool

Minimum Clearances for Flume or Chute Entry to Receiving Pools



3. Children's activity pools shall comply with the specifications listed in Sec. 11-11-53 except as specified in this Article, including compliance with the following specifications:

a. A maximum depth of 24 inches.

b. Children's activity pools which are part of a larger pool shall be protected from areas with water depths greater than 24 inches by providing:

(1). A dark, nonslip tile transition line on the bottom of the pool along the entire two foot water depth contour. The transition line

shall be a minimum of two inches wide. The transition line shall be of high contrasting color.

(2). A transition zone with a maximum floor slope not exceeding 1 to 12.

c. Where "climb-on" toys and attractions are provided, impact absorption materials shall be provided in areas where ejection or falls can reasonably be expected to occur.

4. Wave pools shall comply with the following specifications:

a. Walls of wave pools shall be vertical with a minimum six-inch radius of curvature between the wall and pool bottom.

b. Decks shall have a minimum width of ten feet along the shallow end.

c. A chainlink fence, or similar restrictive barrier acceptable to the Director, shall be installed to direct patrons to access the wave pool from the shallow area. The fence shall be a minimum of 36 inches in height and at least four feet out from the edge of the coping or pool/deck juncture, and shall be provided adjacent to water depths 24 inches or greater. The fence shall be exclusive of the perimeter fence or barrier. Emergency exit openings in the fence or barrier shall be provided at a minimum of one per fifty feet of pool sidewall and shall be a minimum of four feet in width.

d. Prominently identified and conspicuously located wave pool emergency cut-off switch(es) that terminate wave action shall be provided at each wave pool. One emergency cut-off switch shall be provided for every 100 feet of pool perimeter or fraction thereof. Cut-off switches shall be immediately accessible to each lifeguard. Cut-off switches are to be used strictly in the event of an emergency. An "EMERGENCY WAVE CUT-OFF SWITCH" sign shall be posted at the switch, and shall have letters at least four inches in height which are color contrasted with the background color of the sign. The emergency cut-off switch shall not be capable of activating the wave action.

e. A public address system shall be provided for use by authorized personnel, which is clearly audible to all areas of the wave pool.

f. Pool depths shall be measured without wave action.

g. A warning horn and flashing light shall be provided that automatically signals prior to the initiation of wave action. Sufficient time shall be allowed between the warning horn/flashing light and the initiation of wave action to allow patrons the option of leaving the wave pool.

5. Slow river attractions shall have a maximum current speed of three miles per hour.

6. For activity pools in which climb-on toys and attractions are provided in water depths less than 36 inches, impact absorption materials shall be provided in areas where ejection or falls can reasonably be expected to occur. Impact absorption materials may also be required in other areas of the facility as determined by the Director.

Sec. 11-11-110 **Location.**

The location of a waterpark facility shall in no way hinder the operations for which it is designed nor adversely affect patron safety or water quality. Pools within the waterpark facility shall be greater than fifteen feet from any structure, object, or land formation from which a patron could jump into a pool unless, at the discretion of the Director, other measures have been taken that are sufficient to prevent patrons from jumping from the structure, object, or land formation. The Director has the discretion to determine that the minimum fifteen foot distance requirement does not apply to certain segments of attractions or to barriers provided to prevent unauthorized access to pools. The Director may impose additional access restrictions.

Sec. 11-11-111 **Access.**

Additional emergency access gates and lanes, in excess of those required by Sec. 11-11-28, may be required as determined by the Director to allow immediate access to all areas within the waterpark facility.

Sec. 11-11-112 **Slope of Bottom.**

The slope of waterpark facility pools shall comply with the requirements specified in Sec. 11-11-32 with the exception of the waterpark facility pools listed below:

A. *Receiving or exiting pools.* The maximum slope shall not exceed 1 to 7 where total water depth is less than 48 inches.

B. *Activity pools.* The maximum slope shall not exceed 1 to 12 up to a water depth of five feet in activity pools where users enter and participate in extended activities.

C. *Wave Pools.* The maximum slope shall not exceed 1 to 12 where water depths range from 0 to 3.5 feet and shall not exceed 1 to 9 where water depths exceed 3.5 feet.

Sec. 11-11-113 **Handholds and Handrails.**

All pools at waterpark facilities shall be provided with suitable handholds around their perimeter. One handrail for every seven feet, or fraction thereof, of exit area width or perimeter shall be provided at exit steps from receiving pools.

A. Handholds may consist of any one or a combination of the following:

1. Coping, gutter ledges or flanges, or decks which have a top edge that provides a suitable slip resistant handhold located not more than twelve inches above the water line.
2. Ladders, steps or handrails.
3. Other methods approved by the Director.

Sec. 11-11-114 **Stairs, Steps and Ladders.**

Stairs, steps, and ladders shall be constructed as detailed in Sec. 11-11-36 except for the circumstances outlined below.

A. The stairs, ramps, and platforms associated with structure supported attractions shall be designed to provide for the safety of the intended users and shall take into account the following:

1. Heavy patron loads.
2. Slip hazards.
3. Properly located and sized handrails.

B. Wave pools shall be provided with recessed ladders or step holes with vertical grab bars at water depths greater than 3½ feet, for emergency exit only, spaced at intervals of not greater than fifty feet.
C. Stairs and steps shall be recessed into the pool wall or deck.
D. Handrails shall extend over the coping or edge of the deck.
E. Ladders or footholds shall be provided to allow patron exit from pools greater than four feet in water depth, except in receiving pools which bring the user toward a shallow water depth area after entering the water.
F. A minimum of one exit shall be provided for every fifty feet or fraction thereof of pool perimeter for pools whose water depth is greater than four feet. At least two means of egress/ingress shall be provided for each diving area or drop slide receiving pool. The exits shall be arranged to prevent exit paths from crossing slide discharge paths.
G. Slow river attractions shall be provided with properly sized recessed stairwells or rampways with handrails. Entry and exit points shall be sufficiently wide to easily accommodate patrons boarding on or disembarking from flotation devices.
H. Additional handrails at entry and exit areas may be required as determined by the Director.

Sec. 11-11-115 **Recirculation Systems.**

The recirculation system shall meet all of the requirements specified in Sec. 11-11-37 except as specified below:

A. The recirculation system for all pools at a waterpark facility, other than those specified in Sec. 11-11-37 (B), shall be designed to accommodate the following required maximum turnover time:

1. Children's Activity Pool, one hour.
2. Wave pool, two hours.
3. Receiving pool that is completely separate from the main body of the pool, has no more than two attractions, and has a volume of 20,000 gallons or less shall be provided with a turnover time of one hour. The turnover time may be increased by one hour for every additional 20,000 gallons of pool volume up to a maximum of four hours per turnover.
4. All other pools, maximum of four hours.

Sec. 11-11-116 **Pumps.**

Pumps shall meet the specifications outlined in Sec. 11-11-40 (A). Pumps which drive the water current in slow river attractions shall be designed to produce minimal cross currents at their suction and discharge points. Propulsion pump water intake pipes shall be installed in a manner to prevent patron entrapment. The propulsion pump water discharge shall be uniform and located in a manner to cause minimal effect on the patron. Booster pumps shall be sized to provide a continuous river-like flow rate no greater than three mph. The number and size of suction outlets serving the booster pump shall be designed so that the water flow through each suction outlet does not exceed a velocity of half foot per second.

Sec. 11-11-117 **Overflow Gutters and Skimmers.**

Overflow gutters and skimmers shall be provided as specified in Sec. 11-11-45 except that skimmers shall not be used in slow river attractions or any other waterpark facility pools having currents, moving water, or turbulence created by mechanical means or gravity that would prevent efficient skimming action by the skimmers. Alternative means of removing floating debris, which are approved by the Director, shall be provided for such attractions.

Sec. 11-11-118 **Fencing and Barriers.**

At intermediate pools, which are pools between the entry and exit pools in attractions using a series of pools, barriers shall be designed and constructed to prevent unauthorized entry or access from one attraction to another attraction. Fencing or barriers shall also be provided to prevent unauthorized access to a pool(s) or attraction which has designated entry/exit points.

Sec. 11-11-119 **Operation and Maintenance.**

A. Waterparks shall be operated and maintained in accordance with the most restrictive applicable operational standards specified in the following documents:

1. Specifications contained in this Ordinance.
2. ASTM F-24 "Standards on Amusement Rides and Devices."
3. "Virginia Amusement Device Regulations."
4. Industry standards and manufacturer's specifications and recommendations.

B. Personnel.

1. Pool operators shall comply with the requirements specified in Sec. 11-11-10.
2. Lifeguards shall meet the requirements specified in Sec. 11-11-63 and receive training specific to the waterpark facility environment.
3. Attendants shall be trained to operate an attraction and control the patrons in a safe and orderly manner.
    a. Attendants not certified as lifeguards shall not substitute for lifeguards at any waterpark pool or feature.

C. Safety.

1. For all attractions with flumes or chutes, clearing of the receiving pool entry area prior to allowing another patron to enter is required.
2. Use of certain waterpark facility pools may be limited by an individual's swimming ability. Other restrictions may be imposed as necessary.
3. Attendant and lifeguard stations shall be manned at all times that an attraction is in use.
4. U.S. Coast Guard approved personal floatation devices shall be readily available and accessible for those patrons that choose to use them.
5. Outdoor waterpark facilities and indoor waterpark facilities with windows overlooking the facility shall close for 30 minutes following thunder or lightning.

D. Design Load.

Individual pool loads and the maximum facility load shall be determined by the Director, with consideration of Sec. 11-11-108(D)(4). At no time shall the designated maximum pool load or the maximum facility load be exceeded. The maximum facility load and the maximum pool loads shall be posted at the main entrance to the waterpark facility. The

waterpark facility pool operator shall be responsible for enforcing the maximum facility load and maximum pool loads.

1. The maximum pool loads and the maximum facility loads may be additionally restricted due to the following conditions:

a. A congested grouping of patrons, tubes or floatation devices or any other grouping that obstructs the lifeguard's view of the pool bottom.

b. Other conditions which may compromise the health or safety of the patrons.

E. Additional operational procedures.

1. Pool operators shall monitor the water flow rates through flume and attractions to insure that a constant water flow is maintained at rates in accordance with manufacturer's specifications and recommendations.

2. The facility operation and maintenance manual specified in Sec. 11-11-108 (D)(5), shall be maintained at the waterpark facility and be available for inspection at all times.

Sec. 11-11-120 **Ventilation in Indoor Waterpark Facilities**

Indoor waterpark facilities shall be equipped with mechanical ventilation that provides for 0.5 cfm of outdoor air per square feet of pool and deck area. The Director may require additional ventilation for indoor waterpark facilities with features that tend to create water aerosols.

Sec. 11-11-121 **Secondary Disinfection**

The Director may require facilities with features that tend to create water aerosols to employ a secondary disinfection method.

ARTICLE 7. Interactive Water Feature Facilities

Sec. 11-11-122 Water Depth

The depth of water in an interactive water feature facility shall not exceed one inch at any point accessible to the public.

Sec. 11-11-123 Walking Surfaces

A. The walking surfaces of an interactive water feature facility shall be constructed of a non-porous, non-slip material.

B. The walking surfaces of an interactive water feature facility shall be constructed so as to eliminate trip and fall hazards.

C. The walking surfaces of an interactive water feature facility shall be maintained so as to prevent the accumulation of algae or any other slippery substance.

D. Any time the temperature of the walking surface(s) of an interactive water feature facility is predicted to drop below 40°F, the pumps circulating water to the facility shall be shut off and the walking surface allowed to dry.

E. Should ice or frost form on the walking surface(s) of an interactive water feature facility, barriers shall be erected to prevent the public from entering the area of the facility.

Sec. 11-11-124 **Recirculation System.**

A. Water from the interactive water feature facilities shall be collected by gravity below grade in a collector tank or sump. The water shall then be filtered, disinfected, and then pumped to the feature discharge points. All interactive water feature facilities shall be equipped with a recirculation system which, at a minimum, consists of a pump, a filter, connecting piping, fittings, valves, disinfecting equipment, necessary pipe connections to the inlets and outlets, and drains.

B. The water in an interactive water feature facility shall be re-circulated, filtered, and treated at least once every thirty minutes. The water disinfection equipment requirements contained in Sec. 11-11-49 and the water treatment and testing equipment requirements contained in Sec. 11-11-69 shall be met.

C. Adequate provisions shall be made for backwashing and/or cleaning of all filters.

Sec. 11-11-125 **Filter Room.**

The filter room for an interactive water feature facility shall meet the requirements contained in Sec. 11-11-38.

Sec. 11-11-126 **Filters and Gauges.**

The recirculation system for an interactive water feature facility shall meet the requirements contained in Sec. 11-11-39.

Sec. 11-11-127 **Pumps and Strainers.**

A. *Pump.* A removable and reinstallable pump(s) shall be installed with adequate capacity for the required turnover time. Whenever possible, the pump(s) shall be so located as to eliminate the need for priming. If the pump(s) or suction piping is located above the level of the interactive water feature's surface, the pump(s) shall be self-priming. The pump(s) shall be capable of providing a flow adequate for the backwashing of filters. Pumps shall be securely supported.

B. *Strainer.* All pressure filter systems shall have a strainer. The strainer baskets shall be corrosion resistant with openings not exceeding 1/8 inch in size, which provide a free flow area of at least four times the area of the pump suction line at the strainer connection, and shall be accessible for frequent cleaning. An extra strainer basket shall be provided for each strainer.

Sec. 11-11-128 **Piping System.**

A. The piping system for interactive water feature facilities shall be composed of NSF listed materials or their equivalent designed for the following operations:

1. circulating water to the interactive water feature,
2. collecting and re-circulating the water through the treatment equipment,
3. backwashing or washing each filter to waste, and
6. draining the system.

B. There shall be no direct connections between the recirculation system and the sewer or potable water supply.

C. The system shall have a means of discharging filter backwash or other water to waste as follows:

1. Waste from backwashing or draining shall be discharged in a manner approved by the Director. When only a sanitary sewer is available, the rate of discharge is subject to the approval of the appropriate authority for sanitary sewers and treatment facilities.
2. An air gap to prevent a cross-connection between waste discharge piping and recirculation piping shall be provided.
3. Discharge receptor and piping of sufficient size to accept backwash water and prevent backflooding.
4. A sight glass in the backwash discharge line in a readily observable location.
5. In the event the backwash waste pipe will not accommodate the backwash flow, the design and installation of a holding tank shall be required. The holding tank shall be sized to contain 110 percent of the volume of water required to adequately clean the filter(s) at the backwash flow rate and length of time specified by the filter manufacturer.

D. The piping system shall be securely anchored, supported or braced, unless inherently self-supporting. Visible piping shall be marked with permanent tags, labels or markings to clearly identify the direction of flow and shall be color coded as follows:

1. Freshwater blue (to check valve)
2. Backwash black
3. Influent yellow
4. Effluent white

E. All piping shall be designed to minimize friction losses and to carry the required quantity of water at a velocity not to exceed eight feet per second for copper discharge piping, and ten feet per second for discharge piping other than copper. Suction velocity for all piping shall not exceed six feet per second. Pipe suction velocity may also be limited by the maximum flow rate specified by the manufacturer of the suction outlet covers installed.

F. All piping and appurtenances included in the recirculation and filtration system shall be inspected and approved by the Director prior to covering. All piping shall be tested at the time of inspection to at least 25 psi of pressure. All subsurface piping shall be imbedded in and covered with sand or an approved equivalent.

G. All valves shall be clearly identified with permanent markings or tags which are referenced by a water recirculation system operation manual and/or placard.

Sec. 11-11-129 **Drains**

Any drains or suction outlets shall comply with Sec. 11-11-42(A) and shall be covered with a protective grate or anti-vortex cover which is not hazardous to patrons, is anchored in accordance with the manufacturer's specifications and recommendations, and is designed to prevent body entrapment or injury.

Sec. 11-11-130 **Pool Operator**

All interactive water feature facilities must be operated under the immediate control of a pool operator holding a valid pool operators certificate. An operator is not required by this section to be present at the interactive water feature facility at all times, but must be immediately available to the facility in case of emergency.

ARTICLE 8. Bathhouse Facilities; Design, Construction, and Maintenance

Sec. 11-11-131 **Establishments Required to Provide Bathhouse Facilities.**

All aquatic facilities, except interactive water feature facilities, shall provide bathhouse facilities. Motels and other similar establishments which restrict the use of all pools to occupant guests are not required to provide bathhouse facilities.

Sec. 11-11-132 **Design and Location.**

The bathhouse shall be designed so that patrons pass through the rooms containing the dressing areas, showers and toilet fixtures prior to accessing the pool. It shall be provided with an entrance and a separate exit opening directly to the swimming pool, spa pool, or waterpark facility deck; provided, however, the exit shall not be near the deep portion of a swimming pool when the pool depth is greater than five feet.

Sec. 11-11-133 **Floors.**

Floors for all showers, toilets and lavatories in a bathhouse shall have a minimum slope of 1 to 48 to the drains with no low spots which will allow water to pond. Such floors shall have a smooth but non-slip, non-absorbent, finish and shall not be carpeted and shall be maintained in a clean and sanitary condition. The room shall be mechanically ventilated.

Sec. 11-11-134 **Dressing Rooms.**

Separate dressing rooms shall be provided for each sex. Dressing rooms shall be maintained in a clean and sanitary condition. Clothing hooks shall not present a puncture hazard to patrons.

Sec. 11-11-135 **Showers.**

Showers shall be provided in the proportion of one per each forty persons or fraction thereof at each swimming pool, spa pool, or waterpark facility based upon the maximum facility load. Each shower shall supply an adequate quantity of heated water through a device that will prevent scalding. The device that prevents scalding shall be adjusted to provide a maximum hot water temperature at the nozzle head of 110 degrees Fahrenheit, and a minimum hot water temperature at the nozzle head of at least 90 degrees Fahrenheit. Water from each shower shall drain separately or each shower shall be located and have the floor sloped so that waste from one shower shall not flow over the floor serving another. Each shower fixture shall be provided with a liquid soap dispenser and an adequate supply of liquid soap. Showers shall be maintained in a clean and sanitary condition.

Sec. 11-11-136 **Toilets and Urinals.**

Toilet facilities shall be provided in the numbers required by the VUSBC at the time of maximum facility usage. Computations shall be based on the premise that at the time of maximum load half of the patrons will be male and half female unless the facility is exclusively to be used by patrons of one sex. An adequate supply of dispensed toilet

paper shall be provided to each water closet. Toilets and urinals shall be maintained in a clean and sanitary condition.

Sec. 11-11-137 **Lavatories.**

Lavatories shall be provided in the numbers required by the VUSBC at the time of maximum facility usage. Each lavatory shall be provided with a liquid soap dispenser and an adequate supply of liquid soap. Each lavatory shall be provided with an adequate supply of dispensed paper towels and/or a mechanical means of hand drying. Lavatories shall be maintained in a clean and sanitary condition.

Sec. 11-11-138 **Hose Bibs and Cleaning Equipment.**

Hose bibs with vacuum breakers or approved backflow preventers shall be provided at convenient locations. A minimum of one hose bib shall be provided in both the female and male sections of the bathhouse. Hoses, brushes and other cleaning equipment as needed to maintain the bathhouse facility shall be kept stored in the bathhouse facility.

Sec. 11-11-139 **Lighting.**

All areas within the bathhouse facility shall be illuminated at a minimum of thirty foot-candles measured 24 inches above the floor. All light fixtures shall be shielded.

Sec. 11-11-140 **Saunas and Steam Rooms.**

A sauna, steam room, or similar device in which the patron's body is exposed to water, steam, moist or dry heat, that is provided in conjunction with a regulated swimming pool or spa pool facility, shall be installed in accordance with the requirements of the VUSBC, and shall be maintained in a clean and sanitary condition; and shall comply with the following requirements:

A. Shielded, vapor-proof lighting fixtures shall be provided.

B. Adequate mechanical ventilation shall be provided.

C. The doors to all steam rooms and sauna rooms shall have viewing ports fitted with shatterproof glass or plastic, and shall not be capable of being blocked or otherwise secured against opening by pushing from the inside. The door to the sauna or steam room shall open outward.

D. A timer switch that automatically shuts off the heat or steam source. The timer switch shall be readily accessible to patrons and be located directly adjacent to the sauna or steam room and shall have a maximum setting which does not exceed fifteen minutes.

E. A suitable barrier shall be provided to prevent patron injury from the heating element or unit.

F. Bench surfaces shall be of a smooth finish and free of protrusions that could cause injury to patrons.

G. A sign shall be posted stating that users must shower prior to entering the pool.

ARTICLE 9. Exemptions and Alternate Provisions to the Aquatic Health Ordinance

Sec. 11-11-141 **Bed and Breakfast Exemption**

Bed and breakfast facilities permitted by the Director may choose to operate an aquatic facility without an aquatic facility permit as required in 11-11-7 and shall be exempt from the provisions of this chapter provided that:

A. The bed and breakfast notifies the Director annually in writing that they wish to be exempt from the provisions of this chapter, and

B. The bed and breakfast posts a clearly legible sign of a durable, waterproof material at the aquatic facility so that it will be clearly visible to patrons using the facility that says, "This aquatic facility is not permitted or inspected by the Alexandria Health Department. No lifeguard on duty. Swim at your own risk."

Sec. 11-11-142 **Exemption for Residences Where a Child Care Facility is Located**

A swimming pool or spa pool located at a single family home or duplex where a child care facility is located may be operated without an aquatic facility permit as required in 11-11-7 and shall be exempt from the provisions of this chapter provided that the pool facility is secured against entry during the hours of operation of the child care facility by one of the following methods:

A. A locked cover, or

B. A fence that complies with 11-11-50, or

C. Another method approved by the Director.