

Salt Lake County Health Department

Health Regulation

#2

**DESIGN, CONSTRUCTION, AND
OPERATION OF POOLS**

**Adopted by the Salt Lake County Board of Health
September 4, 1984**

**Amended
January 4, 2007
April 1, 2010
December 3, 2015
October 3, 2019**

**Under Authority of
Utah Code Ann. § 26A-1-114**

1. PURPOSE AND APPLICABILITY OF REGULATION

- 1.1. The purpose of this Regulation is to regulate the design, construction, and operation of pools and their facilities and appurtenances in a way that will protect and promote the public health, safety, and welfare and prevent the spread of disease, the creation of threats, the risk of accidents, and damage to property.
- 1.2. This Regulation establishes minimum standards for the design, construction, operation and maintenance of pools. This Regulation does not regulate any pool used only by an individual, family, or members or guests of three or fewer living units.
- 1.3. This Regulation does not require a construction change in any portion of a pool facility if that portion of the pool facility was installed and maintained in compliance with the law in place as of the date of the adoption of this Regulation. Pool facilities which are not in compliance with the law as of the adoption of this regulation must apply for a variance from the applicable portions of this Regulation with the Salt Lake County Board of Health and the Utah Department of Health.
- 1.4. Section 1.3 does not apply to a pool facility which the Department determines is dangerous, unsafe, unsanitary, or a threat or menace to life, health, or property.
- 1.5. If a pool facility or portion of a pool facility was installed and maintained in compliance with the law in effect at the time of installation but does not meet the standards set forth in this Regulation and the owner chooses or is required by the Department to construct, reconstruct, remodel, replace or renovate any portion of a pool facility, the owner must submit a pool facility plan as outlined in sections 4.1.2 – 4.1.5 of this Regulation. No swimming pool, equipment, or appurtenance that does not meet the requirements of this Regulation and the requirements of all other applicable Regulations may be installed subsequent to the adoption of this Regulation.
- 1.6. This Regulation does not regulate any private residential pool. A private residential pool that is used for swimming instruction purposes will not be regulated as a public pool.
- 1.7. This Regulation does not regulate any body of water larger than 30,000 square feet, and for which the design purpose is not swimming, wading, bathing, diving, a water slide splash pool, or children's water play activities.
- 1.8. This Regulation does not regulate a fountain designed for aesthetic appreciation, with no use of the basin or spray for bathing, recreational or otherwise, or which uses potable water that is not recirculated or allowed to pond in the basin.
- 1.9. This Regulation does not regulate float tanks.

2. DEFINITIONS

For the purposes of this Regulation, the following terms, phrases, and words have the meanings herein expressed:

- 2.1. "Access barrier" means a fence, wall, building wall, or combination thereof that completely encloses a pool and obstructs access.
- 2.2. "Bather load" means the number of persons using a pool at any one time or specified period of time.
- 2.3. "Board" means the Salt Lake County Board of Health.
- 2.4. "Cleansing shower" means the cleaning of the entire body with soap and water to remove any matter, including fecal matter, that may wash off into the pool while swimming.
- 2.5. "Department" means the Salt Lake County Health Department.
- 2.6. "Director" means the Director of the Salt Lake County Health Department or his or her designated representative.
- 2.7. "Float tank" means a tank that contains a skin-temperature solution of water and Epsom salts at a specific gravity high enough to allow the user to float supine while motionless and requires a deliberate effort by the user to turn over and that is designed to provide for solitary use and sensory deprivation of the user.
- 2.8. "Gravity drain system" means a pool drain system wherein the drains are connected to a surge or collector tank and rather than drawing directly from the drain, the circulation pump draws from the surge or collector tank, and the surface of the water contained in the tank is maintained at atmospheric pressure.
- 2.9. "High bather load" means 90% or greater of the designed maximum bather load.
- 2.10. "Hydrotherapy pool" means a special purpose pool used exclusively for aquatic therapy, physical therapy, and/or rehabilitation to treat a diagnosed injury, illness, or medical condition, wherein the therapy is provided under the direct supervision of a licensed physical therapist, occupational therapist, or athletic trainer.
- 2.11. "Instructional pool" means a pool used solely for purposes of providing water safety and survival instruction taught by a certified instructor. Instructional pools do not include private residential pools. Private residential pools used for swim instruction is not considered instructional pools as defined in this regulation.
- 2.12. "Interactive water feature" means a fountain which has no ponding of water in the splash zone and consists of an underground reservoir with a recirculation system from which water is directed through sprays, jets, or other means for contact with users who wade or recreate in the fountain with the knowledge and consent of the owner.
- 2.13. "Lifeguard" means an attendant who supervises the safety of bathers.
- 2.14. "Living unit" means one or more rooms or spaces that are, or can be, occupied by an individual, group of individuals, or a family, temporarily or permanently for residential or

overnight lodging purposes. Living units include motel and hotel rooms, condominium units, travel trailers, recreational vehicles, mobile homes, single family homes, and individual units in a multiple unit housing complex.

- 2.15. “Non-regulated temporary water feature” means a temporary water feature designed with no direct water contact from the feature with the public or which utilizes a flow-through system with no ponding of water in a basin and which does not have a recirculation system and is not to be used at a temporary mass gathering event or whose use is restricted to an individual, a family, or no more than three living units’ residents and guests and does not serve four or more living units. Examples of features which are not regulated include, but are not limited to, the following: hamster balls, dunk tanks, and temporary pools at private residences.
- 2.16. “Owner” means any person who alone or jointly or severally with others:
- 2.16.1. Has legal title to any pool or pool facility with or without accompanying actual possession thereof; or
 - 2.16.2. Has charge, care, or control of any pool or pool facility as legal or equitable owner, lessee, or is an executor, executrix, administrator, administratrix, trustee, or guardian of the estate of the owner.
- 2.17. “Person” means any individual, public or private corporation and its officers, partnership, association, firm, trustee, executor/executrix of an estate, the State or its departments, institutions, bureaus, agencies, municipal corporations, counties, cities, political subdivisions, or any legal entity recognized by law.
- 2.18. “Pool” means a man-made basin, chamber, receptacle, tank, or tub which, when filled with water, creates an artificial body of water used for swimming, bathing, diving, and recreational and therapeutic uses.
- 2.19. “Pool deck” means the area contiguous to the outside of the pool curb, diving boards, diving towers, and slides.
- 2.20. “Pool facility” means a pool and any premises, building, plumbing fixtures, equipment, system, or appurtenance which are required under this Regulation and which appertains to the operation of a pool.
- 2.21. “Private residential pool” means a man-made basin, chamber, receptacle, tank or tub which when filled with water creates an artificial body of water whose use is restricted to an individual, a family, or no more than three living units’ residents and guests; and does not serve four or more living units.
- 2.22. “Public pool” means a swimming pool, spa pool, wading pool, or special purpose pool facility which is not a private residential pool and may be above ground or in ground.
- 2.23. “Regulated temporary water feature” means a water feature designed or used for recreational use, in which there is intended full-body contact with water from the feature

with the public, the activity or event encourages or makes unavoidable full body contact with the water of the water feature, or the intended purpose of the water feature is to act as a safety barrier for the activity or event with the likelihood of full-body contact with the water, allows for water to pond in a basin, and/or which utilizes a recirculation system, and is intended to be used at temporary mass gathering events.

- 2.24. "Saturation index" means a value determined by application of the formula for calculating the saturation index in Table 5, which is based on interrelation of temperature, calcium hardness, total alkalinity and pH which indicates if the pool water is corrosive, scale forming, or neutral-
- 2.25. "Spa pool" means a special purpose pool which uses therapy jet circulation, hot water, cold water, bubbles produced by air induction, or any combination thereof to impart a massaging effect upon a bather. Spa pool includes spas, whirlpools, hot tubs, or hot spas.
- 2.26. "Special purpose pool" means a pool with design and operational features that provide patrons recreational, instructional, or therapeutic activities which are different from that associated with a pool used primarily for swimming or diving. Special purpose pools include float tanks, hydrotherapy pools, wave pools, spa pools, water slides, instructional pools, temporary aquatic features, and wading pools.
- 2.27. "Splash pool" means the portion of a water slide located at the terminus of the flume or vehicle slide where sliders may safely exit the water.
- 2.28. "Splash zone" means the maximum distance the water from an interactive water feature can project horizontally.
- 2.29. "Surge tank" means a tank receiving the gravity flow from an overflow gutter and main drain or drains from which the circulation pump takes water and returns it to the system.
- 2.30. "Turnover" means the circulation of a quantity of water equal to the pool volume through the filter and treatment facilities.
- 2.31. "Unblockable drain" means a drain of any size or shape such that a representation of the torso of a 99-percentile adult male cannot sufficiently block it to the extent that it creates a body suction entrapment hazard.
- 2.32. "Vehicle slide" means the portion of a water slide which consists of a slide flume in which bathers descend riding vehicles into a splash pool.
- 2.33. "Wading pool" means a special purpose pool used or designed to be used by children five years of age or younger for wading or water play activities.
- 2.34. "Wastewater" means discharge of pool water resulting from pool drainage or backwash.
- 2.35. "Water slide" means a special purpose pool consisting of slide flumes upon which bathers descend into a splash pool.

3. GENERAL PROVISIONS

3.1. Jurisdiction of the Department.

3.1.1. This Regulation is promulgated by the Board as authorized by Utah Code Ann. § 26A-1-121(1) and Salt Lake County Code of Ordinances, Chapter 9.04.

3.1.2. The Department is empowered to enforce this Regulation in all incorporated and unincorporated areas served by the Department as authorized by Utah Code Ann. § 26A-1-114(1)(a) and Salt Lake County Code of Ordinances, Chapter 9.04.

3.2. It is unlawful for any person not to comply with any regulation promulgated by the Department, unless granted an express variance by the Board.

3.3. Compliance with this Regulation does not constitute a defense if charged with any environmental crime or violation of any local, state, or federal law.

3.4. Legal action taken by the Department under this Regulation does not preclude prosecution for any environmental crime that may have been committed or violation of any other local, state, or federal law.

3.5. Nothing in this Regulation affects or modifies in any way the obligations or liability of any person under any other regulation or provision thereof issued by the Department, any ordinance issued by Salt Lake County or any municipality located within Salt Lake County, or any state or federally issued law, including common law. However, Departmental regulations supersede other existing local and county standards, regulations, and ordinances pertaining to similar subject matter that are inconsistent.

3.6. Verbal or contractual obligations do not diminish or remove the owner's or other responsible person's obligation to comply with this Regulation.

3.7. **Severance.** If any section, sentence, clause, or phrase of this Regulation is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision does not affect the validity of the remaining portions of this Regulation.

4. SUBSTANTIVE PROVISIONS

4.1. Permits and Plan Review.

4.1.1. Operational Permits.

- (i) **Permit Required.** No person is authorized to operate a pool within the limits of Salt Lake County without written approval and a corresponding valid Seasonal or Year-Round Operational Permit from the Department. Operational Permits for newly constructed or remodeled pools will be

issued only after an inspection of the pool by the Department indicates that construction work has been completed in accordance with approved plans.

(ii) **Permit Application, Duration, and Renewal.**

- a. Application for an Operational Permit must be made in writing upon forms furnished by the Department.
- b. **Permit Duration and Renewal.** Seasonal Operational Permits expire five months from date of issuance. Summer seasonal permits are issued for May to September and winter seasonal permits are issued for November to March. Year-Round Operational Permits expire one year from the date of issuance. It is the responsibility of the owner or operator to pursue their respective permit renewal through appropriate channels. The Year-Round Operational Permit is renewable within sixty (60) calendar days prior to expiration.

4.1.2. **Pool Facility Plan Review Required.** Before commencing construction of a pool facility; changing any equipment or appurtenance of any existing pool; or constructing, renovating, or remodeling any pool facility, a Pool Owner must:

- (i) Submit to the Department completed pool facility design plans and specifications as an electronic file; as well as one copy of photometrics for outdoor pool and deck that will be utilized at night.
- (ii) Ensure that plans are stamped and signed by an engineer licensed to practice in the State of Utah attesting that the plans and specifications meet the requirements of this Regulation and all other applicable rules and regulations.

4.1.3. If any changes are made to the originally approved design plans, the applicant must submit the amended design plan drawings, stamped and signed by the engineer, to the Department and obtain approval for the changes.

4.1.4. At least one set of plans bearing the approval stamp of the Department must be available on the construction site at all times during construction.

4.1.5. Department construction approval expires one year from the date of issuance whether or not construction work has been completed.

4.1.6. **Registered Pool Operator.**

- (i) To obtain and maintain an Operational Permit, the pool facility must employ at least one “Registered Pool Operator” permitted by the Department. The number of pools any one Registered Pool Operator may supervise is dependent upon compliance history, considerations of time and distance, and the individual operator’s abilities, but in no event may the total number of supervised pools exceed 10.

- (ii) Registered Pool Operators must establish practices and procedures in pool facilities that will maintain the pool's water chemistry, prevent contamination of pools, and do all else necessary to ensure pool safety in the pool facility where they are employed.
- (iii) **Qualifications and Application for Registered Pool Operator Permit.** To obtain a Registered Pool Operator's Permit, the applicant must:
 - a. Successfully complete one of the following certifications:
 - i. National Swimming Pool Foundation's Certified Pool Operator, CPO, Certification;
 - ii. National Recreation and Parks Association Aquatic Facility Operator, AFO, Certification; or
 - iii. An equivalent certification approved by the Department;
 - b. Submit evidence of completion of an approved certification, including a passing score on the certification's examination;
 - c. Complete the Department's application form; and
 - d. Pay to the Department the Registered Pool Operator fee as required in section 5.1.4 of this Regulation.
- (iv) **Registered Pool Operator Permit Expiration.** A Registered Pool Operator Permit expires on the expiration date of the operator's certification.
- (v) **Limited Use of Title.** No person is permitted use the title "Operator Registered in Pool Safety" or "Registered Pool Operator" or in any way represent themselves as an "Operator Registered in Pool Safety" or as a "Registered Pool Operator" unless he or she holds a current, valid "Registered Pool Operator" permit issued by the Department.
- (vi) **Reciprocity.** The Department may recognize course work and/or certificates and develop reciprocity agreements or similar approval agreements with educational institutions, industry, and state and local health departments provided that:
 - a. The course work or certificate has been completed within three years of applying for Department's Registered Pool Operator Permit;
 - b. Certification/re-certification is achieved on a timely basis specified by the educational institution providing the course work and

examination, and the applicant applies for a Registered Pool Operator Permit from the Department;

- c. The standards for certification are essentially equivalent to or higher than the requirements of this Regulation or the standards set by the Department; and
- d. The reciprocal course and/or certificate are approved by the Department in writing.

(vii) **Sanitation Supervision Duties of Registered Pool Operator.**

- a. In consultation with the pool owner, the Registered Pool Operator must develop an operation, maintenance, and sanitation plan for the pool that will ensure that the pool water meets the sanitation and quality standards set forth in this Regulation. The plan must be in writing and available for inspection by the Department. The plan must specify who is responsible to take and record measurements. These measurement records must include disinfectant residual levels in the pool water, pH and temperature of the pool water, pool circulation rates, quantities of chemicals and filter aid used, filter head loss, filter washing schedule, cleaning and disinfecting schedule for pool decks and dressing rooms, occurrences of fecal release in pool water or on the pool deck, bather load, and other information required by the Department. The Registered Pool Operator must keep the records at the facility for at least two operating seasons. At a minimum, the Registered Pool Operator must measure and record the level of disinfectant residuals, pH, and pool water temperature prior to opening each day.
- b. The Registered Pool Operator is responsible to post the completed Public Pool Data and Specifications Summary, on a Department-approved form, in an easily visible location in the pump room.
- c. If the pool water samples required in section 4.24.10 of this Regulation fail bacteriological quality standards as defined in section 4.24.11, the Department will require the Pool Owner and Registered Pool Operator to develop an acceptable plan in writing to correct the problem. The Department may also require the Registered Pool Operator to:
 - i. Measure and record the level of disinfectant residuals, pH, and pool water temperature at least four times a day;
 - ii. Obtain additional training;
 - iii. Read flow rate gauges and record the pool circulation rate four times a day; and

- iv. Limit bather load if necessary, to ensure the safety of bathers and pool water quality as required in section 4.24 of this Regulation.
- (viii) **Replacement of Registered Pool Operator.** If a pool's Registered Pool Operator terminates employment, the facility must employ a new Registered Pool Operator or enroll an employee in a Department-approved program for Registered Pool Operators within thirty (30) days of the date of termination. This time period may be modified by the Department for justifiable cause. The Department has complete discretion to determine what constitutes "justifiable cause."
- (ix) A Registered Pool Operator who fails to fulfill the required duties as outlined in this Regulation or who negligently creates a health hazard may have his or her permit suspended or revoked by the Department.

4.1.7. **Personal Hygiene.**

- (i) The Registered Pool Operator is responsible for the enforcement of the Personal Hygiene and Behavior rules as stated in section 4.26.5 of this Regulation.
- (ii) The facility operator and staff are also responsible for the enforcement of the following personal hygiene and behavior rules:
 - a. A bather using the facility must take a cleansing shower before entering the pool enclosure. A bather leaving the pool to use the toilet must take a second cleansing shower before returning to the pool enclosure.
 - b. The operator and lifeguards must exclude any person having a communicable disease transmissible by water. A person having any exposed sub-epidermal tissue, including open blisters, cuts, or other lesions may not use a public pool. A person who has or has had diarrhea within the last two weeks caused by an unknown source or from any communicable or fecal-borne disease may not enter any public pool.
 - c. Any child under three years old, any child not toilet trained, and anyone who lacks control of defecation must wear a water-resistant swim diaper and waterproof swimwear. Swim diapers and waterproof swimwear must have waist and leg openings fitted such that they are in contact with the waist or leg around the entire circumference.
 - d. Running, boisterous play, or rough play, except supervised water sports, are prohibited.

- e. The lifeguards and operator will only allow diaper changing in restrooms or changing stations, not at pool side.
- f. Where no lifeguard service is provided, children 14 and under may not use a pool without responsible adult supervision. Children under the age of five may not use a spa or hot tub.

4.2. Water Supply.

- 4.2.1. The water supply serving a pool and all pool facility plumbing fixtures, including drinking fountains, hand sinks, and showers, must meet the requirements for drinking water established by the Department of Environmental Quality.
- 4.2.2. All portions of water supply, recirculation, and distribution systems serving a pool facility must be protected against backflow. Water introduced into the pool, either directly or through the circulation system, must be supplied through an air gap or a backflow preventer in accordance with the International Plumbing Code as incorporated and amended in Utah Code Ann. §§ 15A-1-101 to 15A-6-202, State Construction and Fire Codes Act.
 - (i) The backflow preventer must protect against contamination, back siphonage, and backpressure.
 - (ii) Water supply lines protected by a backflow prevention device must not connect to the pool recirculation system on the discharge side of the pool recirculation pump.
 - (iii) Backflow prevention assemblies must be inspected and tested at least once a year.

4.3. Sewer System.

- 4.3.1. Each public pool must discharge wastewater to a public sanitary sewer system.
- 4.3.2. Each public pool must be connected to a sanitary sewer system through a properly installed air gap.
- 4.3.3. The sewer service must be adequate to serve the pool facility.

4.4. Construction and Materials.

- 4.4.1. Each pool and the appurtenances necessary for its proper function and operation must be constructed of materials that are inert, non-toxic to humans, impervious, enduring over time, and resist the effects of wear and deterioration from chemical, physical, radiological, and mechanical actions.
- 4.4.2. Construction of a pool must withstand the stresses associated with the normal uses of the pool and regular maintenance.

- 4.4.3. Each pool shell must be designed and constructed in a manner that provides a smooth, easily cleanable, non-abrasive and slip-resistant surface.
- 4.4.4. Each pool shell must be electrically bonded to the supporting members.
- 4.4.5. Pool shell surface coatings and textures, including flexible coating materials of at least 60 mils in thickness, may be used if they are adhered to a pool shell that is constructed as provided in sections 4.4.1- 4.4.3 of this Regulation and is slip resistant.
- 4.4.6. Stand-alone vinyl or other flexible liners are prohibited.
- 4.4.7. Pool shell surfaces must be free of cracks or open joints, except for structural expansion joints.
- 4.4.8. A pool shell constructed of materials other than concrete must submit documentation with the plans required in section 4.1.2 of this Regulation that the surface material has been tested and passed by an American National Standards Institute (ANSI) accredited testing facility using one of the following standards that is appropriate to the material used:
 - (i) For a fiberglass reinforced plastic spa pool, the International Association of Plumbing and Mechanical Officials (IAPMO) standard IAPMO/ANSI Z 124.7 2013;
 - (ii) For a fiberglass reinforced plastic swimming pool, the IAPMO IGC 158-2000 standard;
 - (iii) For pools built with prefabricated pool sections or pool members, ISO 19712-1 2008 – Plastics – Decorative solid surfacing materials – Part 1: Classification and specifications; or
 - (iv) A standard that has been approved by the Department based on whether the standard is applicable to the surface and whether it determines compliance with the requirements of this section.
- 4.4.9. Unless otherwise provided in this Regulation, vinyl or other flexible liners are prohibited.
- 4.4.10. A pool shell must by itself withstand, without any damage to the structure, the stresses of complete emptying of the pool without shoring or additional support.
- 4.4.11. A pool shell surface must be of a white or light pastel color.

4.4.12. All manufactured components of the pool must be installed as per manufacturer's recommendations.

4.5. Bather Load.

4.5.1. Unless otherwise provided in this Regulation, the maximum bather load capacity for each area of a pool will be calculated as follows:

- (i) Ten square feet of pool water surface area provided for each bather in a spa pool during maximum load.
- (ii) Twenty square feet of pool water surface area provided for each bather in a swimming pool during maximum load.
- (iii) Fifty square feet or the manufacturer-established capacity at any given time, whichever is larger, of pool water surface area, provided for each bather in a slide plunge pool during maximum load.
- (iv) Ten square feet of surface area per bather at an interactive water feature during maximum occupancy.

4.5.2. The Department may make additional allowances for bathers when the facility operator can demonstrate that lounging and sunbathing patrons will not adversely affect water quality due to over-loading of the pool.

4.6. Design Detail and Structural Stability.

4.6.1. The engineer is responsible to certify the design for structural stability and safety of the public pool.

4.6.2. The shape of a pool and design and location of appurtenances must be such that the circulation of pool water and control of user's safety are not impaired. The engineer must designate pool shell sidewalls and end walls on pool plans.

4.6.3. All parts of the facility subject to freezing damage must be protected from damage due to freezing.

4.7. Depths and Floor Slopes.

4.7.1. The horizontal slope of the floor of any portion of a pool having a water depth of less than five feet must not be steeper than a ratio of 1 to 10, except for a pool used exclusively for scuba-diving training.

4.7.2. The horizontal slope of the floor of any portion of a pool having a water depth greater than five feet must be uniform, allow complete drainage, and not exceed a ratio of 1 to 3, except for a pool used exclusively for scuba-diving training.

4.7.3. The horizontal slope of the pool bottom in diving areas must be consistent with the requirements for minimum water depths as specified in section 4.9 of this Regulation for diving areas.

4.8. Pool Walls and Underwater Seats and Benches.

4.8.1. Pool walls must be vertical, or within plus three degrees of vertical, to a depth of at least two feet nine inches.

4.8.2. Pool walls must transition from wall to floor using a radius or an angle.

4.8.3. When a radius is used as the transition from wall to floor, the radius must meet the following requirements:

- (i) A water depth of three feet or less, a transitional radius from wall to floor must not exceed six inches and must be tangent to the wall and may be tangent to or intersect the floor.
- (ii) A water depth between three feet to five feet, the maximum transitional radius from wall to floor must be determined by calculating the radius as it varies progressively from a maximum six-inch radius at a three-foot depth to a maximum two-foot radius at a five-foot depth.
- (iii) At water depth greater than five feet, the maximum transitional radius from wall to floor must be equivalent to the water depth of the pool less three feet.

4.8.4. When an angle is used as a transition from wall to floor, the angle must meet the following requirements:

- (i) At water depths of three feet or less, a transitional angle from wall to floor must start at maximum three inches above the floor and must intersect the floor at an angle equal to or steeper than 45 degrees from horizontal.
- (ii) At water depths between three feet and five feet, the transitional angle from wall to floor varies progressively, starting at a maximum of three inches above the floor at a three-foot depth, to a maximum of 18 inches above the floor at a five-foot depth, and must intersect the floor at an angle equal to or steeper than 45 degrees from horizontal.
- (iii) At water depths greater than five feet, the transitional angle from wall to floor must be equivalent to the water depth of the pool less three feet six inches and must intersect the floor at an angle:
 - a. Equal to or steeper than 45 degrees from horizontal, or
 - b. Equal to or a shallower angle than the 1:3 floor slope required in section 4.7.2 of this Regulation.

- 4.8.5. All outside corners created by adjoining walls or floor must be rounded or chamfered to eliminate sharp corners to be easily cleanable.
- 4.8.6. Underwater ledges are prohibited, except when approved by the Department for a special purpose pool. Underwater ledges are prohibited in areas of a pool designed for diving. Where underwater ledges are allowed, a line must mark the extent of the ledge within 2 inches of its leading edge. The line must be at least 2 inches in width and in a contrasting dark color for maximum visual distinction.
- 4.8.7. Underwater seats and benches are allowed in pools so long as they conform to the following:
- (i) Seats and benches must be located completely inside of the perimeter shape of the pool. Where seats and benches are not located on the perimeter walls of the pool, seats and benches must have a wall on the back of the seats and benches that extends above the operating level of the pool and is clearly visible to users;
 - (ii) The horizontal surface must be a maximum of 20 inches below the water line;
 - (iii) An unobstructed surface must be provided that is a minimum of 10 inches and a maximum of 20 inches front to back, and a minimum of 24 inches wide;
 - (iv) Seats and benches must not transverse a depth change of more than 24 inches;
 - (v) The minimum horizontal separation between sections of seats and benches must be five feet;
 - (vi) The pool wall under the seat or bench must be flush with the leading edge of the seat or bench and meet the requirements as described in sections 4.8.1, 4.8.2, and 4.8.3 of this Regulation;
 - (vii) Seats and benches must not replace the stairs or ladders required in section 4.10 of this Regulation, but are allowed in conjunction with pool stairs;
 - (viii) Underwater seats may be located in the deep area of the pool where diving equipment (manufactured or constructed) is installed, provided they are located outside of the minimum water envelope for diving equipment; and
 - (ix) A line must mark the extent of the seat or bench within 2 inches of its leading edge. The line must be at least 2 inches in width and in a contrasting dark color for maximum visual distinction.
- 4.8.8. Recessed footholds are allowed provided they are at least four feet under water and meet the requirements of sections 4.10.5 (ii) and (iii) of this Regulation.

4.9. **Diving Areas.**

- 4.9.1. Diving boards must be maintained in a safe working condition.
- 4.9.2. At least 15 feet of free and unobstructed head room must be provided above and continue beyond the diving end of a diving board for a minimum distance of 15 feet.
- 4.9.3. Diving boards or platforms must be parallel to each other and located on the same side of the pool, unless the Department determines that divers will not pose a threat to each other while diving into or exiting from the pool.
- 4.9.4. **Equipment Placement and Clearances.** Where diving is permitted, the diving area design, equipment placement, and clearances must meet the minimum standards of:
 - (i) The 2015-2017 USA Diving Official Technical Rules. Appendix B – FINA Dimensions for Diving Facilities;
 - (ii) Rule 1, Section 1, Article 4 and Rule 1, Section 2, Article 4 of the NCAA Men’s and Women’s Swimming and Diving 2014-2015 Rules and Interpretations;
 - (iii) Table 4.8.2.2 and Figure 4.8.2.2.1 and Figure 4.8.2.2.2 of the 2018 Model Aquatic Health Code; or
 - (iv) Section 402.12 Table 402.12 and Figure 402.12 of the 2015 International Swimming Pool and Spa Code.
- 4.9.5. **Diving Board Handrails, Supports, Platforms, Ladders and Steps.**
 - (i) The engineer or the pool facility owner must anticipate maximum loads on supports, platforms, and steps for diving boards, and ensure that supports, platforms, and steps are of substantial construction and of sufficient structural strength to safely carry the maximum anticipated loads.
 - (ii) Handrails, steps, and ladders leading to diving platforms must be maintained in safe working condition.
 - (iii) Handrails must be installed at all steps and ladders leading to diving boards more than one meter above the water.
 - (iv) Platforms and diving boards over 1-meter high must be designed to protect divers from falls to the deck or pool curb by the installation of guard rails.
- 4.9.6. **Diving Bowl.** Where diving from a height of less than 3.28 feet, 1 meter from water line is permitted, the diving bowl must meet the minimum depths outlined

in Section 6, Figure 1, and Table 2 of ANSI/NSPI-1, 2014, which is adopted by reference, for Type VI, VII and VIII pools according to the height of the diving board above the normal water level. ANSI/NSPI pool type VI is a maximum of 26 inches, 2/3 meter, above the normal water level; type VII is a maximum of 30 inches, 3/4 meter, above the normal water level; and type VIII is a maximum of 39.37 inches, 1 meter, above the normal water level.

4.9.7. **Starting Platforms.** The use of a starting platform must be restricted to competitive swimming events or supervised training for competitive swimming events.

- (i) Starting platforms must be maintained in a safe working condition.
- (ii) When starting platforms are used for competitive swimming or training, the water depth must be at least 4 feet deep.
- (iii) The pool staff must remove or secure starting platforms with a lockable cone-type platform safety cover when not in use.

4.10. **Ladders, Steps, and Handrails.**

4.10.1. **Location.**

- (i) In areas of a pool where the water depth is greater than 2 feet and less than 5 feet as measured vertically from the bottom of the pool to the mean operating level of the pool water, steps or ladders must be provided, and must be located in the area of shallowest depth.
- (ii) In areas of a pool where the water depth is greater than 5 feet as measured vertically from the bottom of the pool to the mean operating level of the pool water, ladders or recessed steps must be provided.
- (iii) A pool over 30 feet wide must be equipped with steps, recessed steps, or ladders as applicable, installed on each end of both side walls.
- (iv) A pool over 30 feet wide and 75 feet or greater in length, must have ladders or recessed steps midway on both side walls of the pool, or be separated by no more than 30 feet in swimming and diving areas and 50 feet in non-swimming areas.
- (v) Ladders or recessed steps must be located within 15 feet of the diving area end wall.
- (vi) No pool is permitted to be equipped with fewer than 2 means of entry/exit.

4.10.2. **Handrails.**

- (i) Handrails must be rigidly installed and constructed in such a way that they can only be removed with tools.
- (ii) Handrails must be constructed of corrosion resistant materials.
- (iii) The outside diameter of handrails must not exceed 2 inches.

4.10.3. **Steps.**

- (i) Steps must have at least one handrail. The handrail must be mounted on the deck and extend to the bottom step either attached at or cantilever to the bottom step.
- (ii) Steps must be constructed of corrosion-resistant material, easily cleanable, and of a safe design.
- (iii) Steps leading into pools must be of non-slip design, have a minimum run of 10 inches and a maximum rise of 12 inches.
- (iv) Steps must have a minimum width of 18 inches as measured at the leading edge of the step.
- (v) Steps must have a line at least one inch in width and be of a contrasting dark color for visual distinction within 2 inches of the leading edge of each step.

4.10.4. **Ladders.**

- (i) Pool ladders must be corrosion-resistant and must be equipped with non-slip rungs.
- (ii) Pool ladders must be designed to provide a handhold and must be rigidly installed and maintained in safe working condition.
- (iii) Pool ladders must have a clearance of not more than 5 inches nor less than 3 inches between any ladder rung and the pool wall.
- (iv) Pool ladders must have rungs with a maximum rise of 12 inches and a minimum width of 14 inches.
- (v) Pool ladders must have a set of handrails located at the top of the course with a rail on each side.

4.10.5. **Recessed Steps.**

- (i) Recessed steps must have a set of grab rails located at the top of the course with a rail on each side which extend over the coping or edge of deck.

- (ii) Recessed steps must be readily cleanable and provide drainage into the pool to prevent the accumulation of dirt on the step.
- (iii) Recessed steps must have a minimum run of 5 inches and a minimum width of 14 inches.

4.11. Decks and Walkways.

- 4.11.1. Unless otherwise provided in this Regulation, a continuous, unobstructed deck at least 5 feet wide must extend completely around the pool. The deck is measured from the pool side edge of the coping if the coping is flush with the pool deck, or from the back of the pool curb if the coping is elevated from the pool deck. Pool curbs must be a minimum of 12 inches wide. If the coping is elevated from the pool deck, the maximum allowed elevation difference between the top of the coping surface and the surrounding deck is 19 inches. The minimum allowed elevation is 4 inches.
- 4.11.2. Deck obstructions may accommodate diving boards, platforms, slides, steps, or ladders so long as at least 5 feet of deck area is provided behind the deck end of any diving board, platform, slide, step, or ladder. Other types of deck obstructions may also be allowed by the Department so long as the obstructions meet all of the following criteria:
 - (i) The total pool perimeter that is obstructed equals less than 10 percent of the total pool perimeter; likewise, no more than 15 feet, 4.56 meters, of pool perimeter can be obstructed in any one location;
 - (ii) Multiple obstructions must be separated by at least five feet, 1.52 meters;
 - (iii) An unobstructed area of deck not less than five feet, 1.52 meters, is provided around or through the obstruction and located not more than fifteen feet, 4.55 meters, from the edge of the pool;
 - (iv) The design of the obstruction does not endanger the health or safety of persons using the pool; and
 - (v) Written approval for the obstruction is obtained from the Department prior to, or as part of, the plan review process.
- 4.11.3. The deck must slope away from the pool to deck drains or floor drains at a grade of 1/4 inch to 3/8 inch per linear foot. Deck drains and floor drains must not return water to the pool or the circulation system.
- 4.11.4. Decks and walkways must be maintained free of standing water, constructed to drain away water, and must have non-slip surfaces.
- 4.11.5. Wooden decks, walks or steps are prohibited.

4.11.6. Carpeting must not be installed within 5 feet of the water side edge of the coping. Where carpeting is permitted, it must be wet vacuumed as often as necessary to keep it clean and free from accumulated water.

4.11.7. Decks and walkways must be maintained in a safe and sanitary condition, free from litter and tripping hazards.

4.11.8. Steps for serving decks must meet the following requirements:

- (i) Risers of steps for the deck must be uniform and have a minimum rise of 4 inches and a maximum height of 7 inches.
- (ii) The minimum run of steps must be 10 inches.
- (iii) Steps must have a minimum width of 18 inches.

4.12. **Fencing and Barriers.**

4.12.1. An access barrier is required and must provide complete perimeter security of the facility and be at least six feet in height. Openings through the fence or barrier, other than entry or exit access, when the access is open, must not permit a sphere greater than 4 inches to pass through it at any location. Horizontal members must be equal to or more than 45 inches apart.

- (i) If the Department determines that the safety of children is not compromised, it may exempt indoor pools from the fencing requirements.
- (ii) The Department may grant exceptions to the height requirements in consideration of architectural and landscaping features for pools designed for hotels, motels, and apartment houses.
- (iii) A fence or barrier that has an entrance to the facility must be equipped with a self-closing and self-latching gate or door. Except for self-locking mechanisms, self-latching mechanisms must be installed 54 inches above the ground and must be provided with hardware for locking the gate when the facility is not in use. A lock that is separate from the latch and a self-locking latch must be installed with the lock's operable mechanism (key hole, electronic sensor, or combination dial) between 34 inches, , and 48 inches, above the ground. All gates for the pool enclosure must open outward from the pool except where emergency egress codes require them to swing into the aquatic venue enclosure.

4.12.2. The gate or door must have no opening greater than 0.5 inches within 18 inches of the latch release mechanism.

4.12.3. Any pool enclosure which is accessible to the public when one or more of the pools are not being maintained for use, must protect those closed pools from

access by a sign written in all capital letters that are at least four inches in height indicating the pool is closed and by using:

- (i) A safety cover which restricts access and meets the minimum ASTM standard F1346.91; or
- (ii) A secondary barrier that is approved by the Department

4.12.4. Access to the pool must be prohibited when the facility is not open for use.

4.12.5. **Emergency Exit.** Gates and/or doors must be designed in such a way that they do not prevent egress in the event of an emergency. Emergency exits must be clearly and conspicuously labeled with a sign that states “EMERGENCY EXIT” in 4-inch high letters.

4.13. **Depth Markings and Safety Ropes.**

4.13.1. Markings with numerals at least 4 inches high must be located above the water line or within 2 inches of the coping on the vertical wall of the pool and on the deck within 16 inches of the pool side edge of the coping at one foot increments of depth, spaced at distances not greater than 25 feet apart. The markings must provide the locations of maximum and minimum pool depth.

4.13.2. A pool with both swimming and diving areas must have a floating safety rope separating the swimming and diving areas. An exception to this requirement is made for special activities, such as swimming contests or training exercises when the full unobstructed length of the pool is used.

- (i) The safety rope must be securely fastened to wall anchors. Wall anchors must be of corrosion-resistant materials and must be recessed or have no projections that may be a safety threat if the safety rope is removed.
- (ii) The safety rope must be marked with visible floats spaced at intervals of 7 feet or less.
- (iii) The rope must be at least 1/2 inch in diameter, and of sufficient strength to support the loads imposed on it during normal bathing activities.

4.13.3. A pool constructed with a change in the slope of the pool floor must have the change in slope designated by a floating safety rope and a line of demarcation on the pool floor. An exception to this requirement is made for special activities, such as swimming contests or training exercises when the full unobstructed length of the pool is used.

- (i) The floating safety rope designating a change in slope of the pool floor must be attached at the locations on the pool wall that place it directly above and parallel to the line on the bottom of the pool. The floating safety rope must meet the requirements of section 4.13.2 of this Regulation.

- (ii) A line of demarcation on the pool floor must be marked with a contrasting dark color.
- (iii) The line must be at least two inches in width.
- (iv) The line must be located twelve inches toward the shallow end from the point of change in slope.

4.14. **Circulation Systems.** A pool must contain a circulation system consisting of pumps, piping, filters, water conditioning and disinfection equipment, and other related equipment. The area housing the circulation equipment must be designed with adequate working space so that all equipment may be easily disassembled, removed, and replaced for proper maintenance.

4.14.1. The circulation lines of jet systems and other forms of water agitation must be independent and separate from circulation, filtration, and heating systems.

4.14.2. The pool may be exempt from the requirement to have a circulation system if the turnover rate requirements as specified in section 4.14.6 of this Regulation can be met by continuous introduction of fresh water and wasting of pool water under conditions satisfying all other requirements of this Regulation.

4.14.3. **General Circulation System Maintenance, Materials, and Operation.**

- (i) The operator must maintain the normal water line of the pool at the overflow rim of the gutter, if an overflow gutter is used, or at the midpoint of the skimmer opening if skimmers are used whenever the pool is open for bathing. An exemption to this requirement may be granted by the Department if the pool operator can demonstrate that the safety of the bathers is not compromised.
- (ii) The circulation equipment must be operated continuously except for periods of routine or other necessary maintenance and must be designed to permit complete drainage of the system.
- (iii) Piping must be of non-toxic material, resistant to corrosion and be able to withstand operating pressures.
- (iv) Plumbing must be identified by a color code or labels.
- (v) The area housing the circulation equipment must be designed with adequate working space so that all equipment may be easily disassembled, removed, and replaced for proper maintenance.
- (vi) Written operational instructions for the equipment in the circulation system must be immediately available at the facility at all times.

- (vii) Pumps with the ability to decrease flow when the pool has little or no use are allowed as long as the original approved and designed number of turnovers are achieved in 24 hours that would be required using the turnover time listed in Table 1 and the water quality standards of 4.23 can be maintained.

4.14.4. **Velocity.**

- (i) The water velocity in discharge piping must not exceed 10 feet per second.
- (ii) The water velocity for copper piping must not exceed 8 feet per second.
- (iii) Suction velocity for all piping must not exceed 6 feet per second.

4.14.5. **Rate-of-Flow Indicator.** A rate-of-flow indicator, reading in gallons per minute, must be properly installed and located according to manufacturer's recommendations. The indicator must be located in a place and position where it can be easily read. The indicator must be accurate to within ten percent of true flow.

4.14.6. **Turnover Rate.** The circulation system must clarify and disinfect the entire volume of pool water in 8 hours or less. The turnover rate must be increased to provide a 6-hour turnover for a pool subjected to high bather loads.

4.14.7. **Strainers.** The circulation system must include a strainer to prevent hair, lint, etc., from reaching the pump.

- (i) Strainers must be corrosion-resistant with openings not more than 1/8 inch in size.
- (ii) Strainers must provide a free flow capacity of at least four times the area of the pump suction line.
- (iii) Strainers must be readily accessible for frequent cleaning and maintained in a clean and sanitary condition.
- (iv) Each pump strainer must be provided with necessary valves to facilitate cleaning of the system without excessive flooding.

4.14.8. **Vacuum Cleaning.** A vacuum-cleaning system must be provided.

- (i) The number of connections provided must facilitate access to all areas of the pool through hoses less than 50 feet in length.
- (ii) If this system is an integral part of the circulation system, connections must be located in the walls of the pool, at least 8 inches below the water line. This requirement does not apply to vacuums operated from skimmers.

4.14.9. **Pumps.**

- (i) Pumps must be of adequate capacity to provide the required number of turnovers of pool water as specified in section 4.14. Table 1 of this Regulation.
- (ii) The pump or pumps must be capable of providing flow adequate for the backwashing of filters.
- (iii) The pump or pumps must supply the circulation rate of flow at a dynamic head which includes:
 - a. Fitting and friction losses;
 - b. An additional loss of 15 feet for rapid sand filters, vacuum diatomite filters, or vacuum cartridge filters;
 - c. An additional loss of 40 feet for pressure diatomite filters, high rate sand filters or cartridge filters;
 - d. Pool inlet orifice loss of 15 feet.

TABLE 1: CIRCULATION

Pool Type:	Minimum Number of Wall Inlets	Minimum Number of Skimmers 3,500 sq. ft. or less	Minimum Turnover Time
1. Pool	1 per 10 ft	1 per 500 sq. ft.	Eight Hours
2. Pool, High bather load	1 per 10 ft	1 per 500 sq. ft.	Six Hours
3. Wading Pool	1 per 20 ft minimum of two equally spaced.	1 per 500 sq. ft.	One Hour
4. Spa	1 per 20 ft.	1 per 100 sq. ft.	30 Min.
5. Wave	1 per 20 ft.	1 per 500 sq. ft.	6 Hours
6. Slide	1 per 20 ft.	1 per 500 sq. ft.	One Hour
7. Vehicle Slide	1 per 10 ft.	1 per 500 sq. ft.	One Hour
9. Interactive Water Feature	N/A	N/A	30 minutes.

4.14.10. **Heaters.** A pool equipped with heaters must meet the requirements for boilers and pressure vessels as required by the State of Utah Boiler and Pressure Vessel Rules, Utah Administrative Code R616-2, and must have a fixed thermometer mounted in the pool circulation line downstream from the heater outlet. The heater must be provided with a heat sink as required by manufacturer's instructions.

4.14.11. **Circulation Line Valves.** All circulation lines to and from the pool must be regulated with valves in order to control the circulation flow.

- (i) All valves must be located where they will be readily and easily accessible for maintenance and removal.
- (ii) Multiport valves must comply with National Sanitation Foundation 50-2015-7 which is incorporated and adopted by reference.

4.14.12 **Air Induction Systems.** Each air induction system installed must comply with the following requirements:

- (i) An air induction system must be designed and maintained to prevent any possibility of water back-up that could cause electrical shock hazards.
- (ii) An air intake must not introduce contaminants such as noxious chemicals, fumes, deck water, dirt, etc. into the pool.

4.15. **Inlets.** Inlets for fresh or treated water must be located to produce uniform circulation of water and to facilitate the maintenance of a uniform disinfectant residual throughout the entire pool.

4.15.1 **Wall Inlets.**

- (i) Where wall inlets from the circulation system are used, they must be flush with the pool wall and submerged at least 5 feet below the water line, or at the bottom of the vertical wall surface. Unless otherwise provided for in this Regulation, inlets must be placed every 10 feet around the pool perimeter.
- (ii) To ensure thorough chemical distribution if a pool has a width greater than 50 feet, the Department may require floor inlets to be installed at the center of the pool width in addition to the required wall inlets.

4.15.2 **Floor Inlets.** If floor inlets from the circulation system are used, they must be:

- (i) Spaced a maximum of 15 feet from each other and the distance from floor inlets to the pool wall must not exceed 7.5 feet if there are no inlets on that wall. If there are wall inlets the floor inlets must be at least 15 feet from that pool wall;

- (ii) Flush with the floor;
- (iii) Designed such that the flow can be adjusted to provide sufficient head loss to ensure balancing of flow through all inlets; and
- (iv) Designed such that the flow cannot be adjusted without the use of a special tool.

4.15.3 **Orifices, Head Loss, and Return Supply Piping.** Each inlet must be designed as a directionally adjustable and lockable orifice with sufficient head loss to ensure balancing of flow through all inlets. The return supply piping loop must be sized to provide less than 2.5 feet of head loss to the most distant orifice in the loop to ensure approximately equal flow through all orifices.

- (i) Inlets must be locked in place once adjusted for uniform circulation.
- (ii) The head loss requirement for orifices may be reduced so long as it can be shown by demonstration that at least a 6.1 pressure ratio from orifice to the return loop is maintained.

4.15.4 **Exemptions.** The Department may grant an exemption to the inlet placement requirements on a case by case basis for inlet designs that can be demonstrated to produce uniform mixing of pool water.

4.16 Outlets.

4.16.1 Each pool whose construction is commenced after Dec. 19, 2009 must have a minimum of two outlets with each outlet being separated by at least three feet and not more than 30 feet apart measured from the center of the drain cover outlet which meet the following design criteria:

- (i) **Protective Grating.** The grates or covers of all submerged suction outlets must comply with the requirements of ANSI/APSP-16 2011. Outlets must have a protective grate securely fastened in such a way that the use of tools is required to remove it. A pool must not operate with broken, damaged or missing drain grates or covers.
- (ii) Outlets must be constructed so that if one of the outlets is completely obstructed, the remaining outlet(s) and related piping will be capable of handling 100 percent of the maximum design circulation flow.
- (iii) Outlets must have pipe diameters of equal size and connected to pipes of equal diameter. The tee feeding to the common suction line from the outlets must be located approximately midway between outlets.
- (iv) The outlet system must be constructed to ensure that no outlet can be cut out of the suction line by a valve or other means.

- (v) At least one of the outlets must be located in the deepest area of the pool to permit the pool to be completely and easily emptied.
- (vi) The outermost main drain outlets must be located within 15 feet from side walls.
- (vii) Devices or methods used for draining pools must prevent overcharging the sanitary sewer.
- (viii) Multiple pumps may utilize the same outlets, provided the outlets are sized to accommodate 100 percent of the total combined designed flow from all pumps and that the flow characteristics of the system must meet the requirements of section 4.16.1 of this Regulation.
- (ix) No feature or circulation pump is permitted to be connected to less than two outlets unless the pump is connected to a gravity drain system or the pump is connected to an unblockable drain.

4.16.2 **Existing Pools.** Notwithstanding sections 1.3 – 1.5 of this Regulation, the circulation system on existing pools that do not meet the current requirements of section 4.16.1 must have all suction outlets equipped with grates or covers which comply with the requirements of ANSI/APSP-16 2011. Pools with single main drains must be additionally retrofitted using any of the following means:

- (i) **Safety vacuum release system.** A safety vacuum release system which ceases operation of the pump, reverses the circulation flow, or otherwise provides a vacuum release at a suction outlet when a blockage is detected, that has been tested by an independent third party and found to conform to ASME/ANSI standard A112.19.17-2010 or ASTM standard F2387.
 - a. To ensure proper operation, the Registered Pool Operator must inspect and test the vacuum release system at least once a week but no less often than established by the manufacturer.
 - b. The Registered Pool Operator must test the vacuum release system in a manner specified by the manufacturer.
 - c. The Registered Pool Operator must log all inspections, tests and maintenance and retain the records for a minimum of two years for review by the Department upon request.
 - d. The vacuum release system must include a suitable notification system to alert patrons and the Registered Pool Operator in the event the system has inactivated the circulation system. The Registered Pool Operator must submit to the Department for approval the design of the notification system prior to installation. The system must activate a continuous clearly audible alarm that can be heard in all areas of the pool or a continuous visible alarm

that can be seen in all areas of the pool. An easily readable sign must be posted next to the sound or visible alarm source. The sign must state, "DO NOT USE THE POOL IF THIS ALARM IS ACTIVATED" and provide the phone number of the responsible party.

e. No Registered Pool Operator is allowed the use of a pool that has a single drain with a safety vacuum release system if the safety vacuum release system is not functioning properly.

- (ii) **Installation of dual main drains.** Both outlets must meet the requirements listed in section 4.16.1 except 4.16.1(vi) of this Regulation.
- (iii) **Gravity drainage system.** A gravity drainage system where the pump draws from a surge or collector tank rather than directly from the pool drain.
- (iv) **Unblockable drain.** A drain of a size and shape that a human body cannot sufficiently block to create a suction entrapment hazard.
- (v) **Other systems.** Any other system determined by the Department to be equally effective as, or better than, the systems described above in sections (i) through (iv) at preventing or eliminating the risk of injury or death associated with pool drainage systems.

4.16.3 The pool owner must retrofit by Dec. 19, 2009 each pool circulation system on existing pools that do not meet the requirements of section 4.16.2 of this Regulation.

4.17. **Overflow Gutters and Skimming Devices.** Unless otherwise provided in this Regulation, a pool having a surface area of over 3,500 square feet must have overflow gutters. A pool having a surface area of 3,500 square feet or less must have either overflow gutters or skimmers.

4.17.1. **Overflow Gutter Systems.** Overflow must be designed and constructed in compliance with the following requirements:

- (i) Overflow gutters must extend completely around the pool, except at steps, ramps, or recessed ladders.
- (ii) The gutter system must be capable of continuously removing pool water at 100 percent of the maximum flow rate.
- (iii) The gutter system must be connected to the circulation system by means of a surge tank.
- (iv) The opening into the gutter beneath the coping or grating must be at least 3 inches in height and depth.

- (v) Gutters must be designed to prevent entrapment of any part of a bather's body. The edge must be rounded to be used as a handhold and must be no thicker than 2.5 inches, for the top 2 inches. Gutter outlet pipes must be at least 2 inches in diameter. The outlet grates must have unobstructed openings equal to at least one and one-half times the cross-sectional area of the outlet pipe.

4.17.2. **Skimmer Systems.** Skimmers, if provided, must be designed and constructed in compliance with the following requirements:

- (i) Skimmers must comply with National Sanitation Foundation NSF 50-2015 standards or equivalent. Skimmers are permitted on any pool with a surface area equal to or less than 3,500 square feet. At least one skimming device must be provided for each 500 square feet, of water surface area or fraction thereof. Where two or more skimmers are required, they must be spaced to provide an effective skimming action over the entire surface of the pool.
- (ii) Skimmers must be built into the pool wall.
- (iii) The piping and other components of a skimmer system must be designed for a total capacity of at least 80 percent of the maximum flow rate of the circulation system.
- (iv) Skimmers must be designed with a minimum flow rate of 25 gallons per minute and a maximum flow rate of 55 gallons per minute. Alternatively, skimmers may also be designed with a minimum of 3.125 gallons to 6.875 gallons per lineal inch of weir. A higher maximum flow may be allowed through a skimmer up to the skimmer's NSF rating if the piping is designed to accommodate the higher flow rates.
- (v) Each skimmer weir must be automatically adjustable and must operate freely with continuous action to variations in water line over a range of at least four inches. The weir must operate at all flow variations. Skimmers must be installed with the normal operating level of the pool water at the mid-point of the skimmer opening or in accordance with the manufacturer's instructions.
- (vi) An easily removable and cleanable basket or screen through which all overflow water passes, must be provided to trap large solids.
- (vii) The skimmer system must be provided with a device to prevent air-lock in the suction line. These devices may include an equalizer pipe, surge tank, or other arrangement that will assure a sufficient amount of water for pump suction in the event the pool water drops below the weir level. If an equalizer pipe is used, the following requirements must be met:
 - a. The equalizer pipe must be sized to meet the capacity requirements for the filter and pump.

- b. The equalizer pipe must not be less than two inches in diameter.
- c. The equalizer pipe must be located at least one foot below a valve or equivalent device that will remain tightly closed under normal operating conditions. In a shallow pool where an equalizer pipe cannot be submerged at least one foot below the skimmer valve, the equalizer pipe must be connected to a separate dedicated outlet with an anti-entrapment outlet cover in the floor of the pool that meets the requirements of ANSI/APSP-16-2011.
- d. The equalizer pipe must be protected with a cover or grate that meets the requirements of ANSI/APSP-16 2011 and is sized to accommodate the design flow requirement of section 4.17.2 (iii) of this Regulation.

(viii) The skimmer weir, float valves, check valves, and basket must be maintained in a clean and sanitary condition and in good repair.

(ix) Where skimmers are used, a continuous handhold is required around the entire perimeter of the pool except in areas of the pool that are zero depth and must be installed not more than 9 inches above the normal operating level of the pool. The decking, coping, or other material may be used as the handhold so long as it has rounded edges, is slip-resistant, and does not exceed 3.5 inches in thickness. The overhang of the coping, decking, or other material must not exceed 2 inches, nor be less than 1 inch, beyond the pool wall. An overhang may be up to a maximum of 3 inches to accommodate an automatic pool cover track system

4.18. **Filtration.** A pool must use a rapid sand filter, high-rate sand filter, diatomaceous earth filter, or cartridge filter.

4.18.1. **General Filtration System Design.** The filtration system must be designed to allow the operator to determine the relative clarity of discharge backwash water from the filter. The filtration system must also provide for isolation of individual filters for backwashing or other service. Filtration systems must comply with NSF 50-2015.

4.18.2. **Rapid Sand Filters.**

- (i) Rapid sand filters must be designed for a filter rate of three gallons or less, per minute per square foot of bed area at time of maximum head loss. The filter bed surface area must be sufficient to meet the design rate of flow required by section 4.14, Table 1 of this Regulation for required turnover.
- (ii) The filtration system must be provided with influent pressure, vacuum, or compound gauges to indicate the condition of the filters or piping system.
- (iii) An air-relief valve must be provided at or near the high point of the filter.

- (iv) The filter system must be provided with an influent pressure gauge.
- (v) The filtration system must be designed with necessary valves and piping to permit:
 - a. Filtering of all pool water;
 - b. Individual backwashing of filters to a sanitary sewer at a minimum rate of 15 gallons per minute per square foot of filter area;
 - c. Isolation of individual filters;
 - d. Complete drainage of all parts of the system; and
 - e. Necessary maintenance, operation and inspection in a convenient manner.
- (vi) **Pressure Type Rapid Sand Filters.** Each pressure type filter tank must be provided with an access opening of at least a standard size 11 inches by 15-inch manhole with a cover.

4.18.3 **High-Rate Sand Filters.** High-rate sand filters must comply with the following:

- (i) Be designed for a filter rate of less than 18 gallons per minute per square foot of filter surface area. Minimum flow rates must be at least 13 gallons per minute per square foot of bed area. The filter surface area must be sufficient to meet the design rate of flow required by section 4.19 of this Regulation for required turn over. The minimum flow rate requirement may be reduced to a rate no less than 10 gallons per minute per square foot of bed area where a multiple filter system is provided, and where the system includes a valve or other means after the filters which is designed to regulate the back flow rate and to ensure that adequate back wash flow can be achieved through each filter per the filter manufacturer's requirements.
- (ii) The filter tank and all components must be installed in accordance with the manufacturer's recommendations.
- (iii) The filtration system must be designed with necessary valves and piping to permit:
 - a. Filtering of all pool water;
 - b. Individual backwashing of filters to a sanitary sewer at a minimum rate of 15 gallons per minute per square foot of filter area;
 - c. Isolation of individual filters;

- d. Complete drainage of all parts of the system; and
 - e. Necessary maintenance, operation, and inspection in a convenient manner.
- (iv) An air-relief valve must be provided at or near the high point of the filter.
 - (v) The filter system must be provided with an influent pressure gauge.

4.18.4. **Vacuum or Pressure Type Pre-coat Media Filter Requirements.** Vacuum or pressure type pre-coat media filters must comply with the following:

- (i) The filtering area must be compatible with the design pump capacity as required by section 4.14.9 of this Regulation. The design rate of filtration must not exceed 2.0 gallons per minute per square foot of effective filtering surface without continuous body feed, nor greater than 2.5 gallons per minute per square foot, with continuous body feed.
- (ii) Where body feed is provided, the feeder device must be accurate to within 10 percent, capable of continual feeding within a calibrated range, and adjustable from two to six parts per million. The device must feed at the design capacity of the circulation pump.
- (iii) Where fabric is used, filtering area must be determined on the basis of effective filtering surfaces.
- (iv) The filter and all component parts must be designed and constructed of materials which will withstand normal continuous use without significant deformation, deterioration, corrosion or wear, which could adversely affect filter operations.
- (v) If a pre-coat media filter is supplied with a potable water supply, then the water must be delivered through an air gap.
- (vi) The filter plant must be provided with influent pressure, vacuum, or compound gauges to indicate the condition of the filter. In vacuum-type filter installations where the circulating pump is rated at two horsepower or higher, an adjustable high vacuum automatic shut-off device must be provided to prevent damage to the pump. Air-relief valves must be provided at or near the high point of the filter system.
- (vii) A filter must be designed to facilitate cleaning by one or more of the following methods: backwashing, air-bump-assist backwashing, automatic or manual water spray, or agitation.
- (viii) The filtration system must provide for complete and rapid draining of the filter.

- (ix) Diatomaceous earth filter backwash water must discharge to the sanitary sewer system through a separation tank. The separation tank must have a precautionary statement warning the user not to start up the filter pump without first opening the air relief valve.
- (x) Personal protection equipment suitable for preventing inhalation of diatomaceous earth or other filter aids must be provided.
- (xi) The Department may waive National Sanitation Foundation, NSF 50-2015, standards for pre-coat media filters and approve site-built or custom-built vacuum pre-coat media filters, if the pre-coat media filter elements are easily accessible for cleaning by hand hosing after each filtering cycle. Site-built or custom-built vacuum pre-coat media filters must comply with all design requirements as specified in section 4.18.4 of this Regulation.
- (xii) Any design which provides the equivalent washing effectiveness as determined by the Department may be acceptable. Where the Department determines that a potential cross-connection exists, a hose bib in the vicinity of the filter to facilitate the washing operation must be equipped with a vacuum breaker listed by the International Association of Plumbing and Mechanical Officials, IAPMO, the American Society of Sanitary Engineering, A.S.S.E., or other nationally recognized standard.

4.18.5. **Cartridge Filters.** Vacuum or pressure type cartridge filters must comply with the following:

- (i) Cartridge filters must be designed for a filter rate of less than 0.375 gallons per minute per square foot of effective filter area. The filter surface area must be sufficient to meet the design rate of flow required by section 4.14.9 of this Regulation for required turnover.
- (ii) The filter and all component parts must be designed and constructed of materials which will withstand normal continuous use without significant deformation, deterioration, corrosion or wear, which could adversely affect filter operations. The filter element must be constructed of polyester fiber only.
- (iii) The filter must be fitted with influent and effluent pressure gauges, vacuum, or compound gauges to indicate the condition of the filter. In vacuum type filter installations where the circulating pump is rated at two horsepower or higher, an adjustable high vacuum automatic shut-off must be provided to prevent damage to the pump. Air-relief valves must be provided at or near the high point of the filtration system.
- (iv) Cleaning of cartridge type filters must be accomplished in accordance with the manufacturer's recommendations.

4.19. Disinfectant and Chemical Feeders.

- 4.19.1. A pool must be equipped with a disinfectant feeder or feeders which conform to the National Sanitation Foundation, NSF 50-2015, standards relating to mechanical chemical-feeding equipment and flow through chemical feeding equipment for swimming pools or be deemed equivalent by the Department.
- 4.19.2. All chlorine dosing and generating equipment, including erosion feeders, or in-line electrolytic and brine/bath generators must be designed with a capacity to provide the following:
- (i) Outdoor pools; 4.0 pounds of free available chlorine per day per 10,000 gallons of pool water; or
 - (ii) Indoor pools; 2.5 pounds of free available chlorine per day per 10,000 gallons of pool water.
- 4.19.3. Where compressed chlorine gas is used, the following additional features must be provided:
- (i) Chlorine and chlorinating equipment must be located in a secure, well-ventilated enclosure separate from other equipment systems or equipment rooms. Such enclosures must not be below ground level. If an enclosure is a room within a building, it must be provided with vents near the floor which terminate at a location out-of-doors. Enclosures must be located to prevent contamination of air inlets to any buildings and areas used by people. Forced air ventilation capable of providing at least one complete air change per minute, must be provided for enclosures.
 - (ii) Substances which are incompatible with chlorine must not be kept in the chlorine enclosure.
 - (iii) Chlorine cylinders must be secured. An approved valve stem wrench must be maintained on the chlorine cylinder so the supply can be shut off quickly in case of emergency. Valve protection hoods and cap nuts must be kept in place except when the cylinder is connected.
 - (iv) Doors to chlorine gas and equipment rooms must be labeled "DANGER CHLORINE GAS" in letters at least four inches in height and display the United States Department of Transportation placard and I.D. number for chlorine gas.
 - (v) The chlorinator must be designed so that leaking chlorine gas will be vented to the out-of-doors.
 - (vi) The chlorinator must be a solution feed type, capable of delivering chlorine at its maximum rate without releasing chlorine gas to the atmosphere. Injector water must be furnished from the pool circulation system with

necessary water pressure increases supplied by a booster pump. The booster must be interlocked with both the pool circulation pump and with a flow switch on the return line.

- (vii) Chlorine feed lines must not carry pressurized chlorine gas.
- (viii) An unbreakable bottle of ammonium hydroxide, of approximately 28 percent solution in water, must be readily available for chlorine leak detection.
- (ix) A self-contained breathing apparatus approved by NIOSH for entering environments that are immediately dangerous to life or health (IDLH) must be available and must have a minimum capacity of fifteen minutes. The breathing apparatus must be kept in a closed cabinet located outside of the room in which the chlorinator is maintained, and must be accessible at all times without use of a key or lock combination.
- (x) The Registered Pool Operator must demonstrate to the Department through training documentation, that all persons who operate, or handle gas chlorine equipment are knowledgeable about safety and proper equipment handling practices to protect themselves, staff members, and the public from accidental exposure to chlorine gas.
- (xi) The facility operator or his designee must immediately notify the Department of any inadvertent escape of chlorine gas.

4.19.4. Each bactericidal agent must be registered by the United States Environmental Protection Agency (EPA) for use in swimming pools.

4.19.5. Positive displacement pumps and piping used to apply chemicals to the water must be sized, designed, and constructed of materials that can be cleaned and maintained free from clogging at all times. Materials used for such equipment and piping must be resistant to the effects of the chemicals in use.

4.19.6. Chemical feed pumps must be wired electrically to the main circulation pump and be dependent upon the operation of the main circulation pump. If a chemical feed pump has an independent timer, the main circulation pump and chemical feed pump timer must be interlocked.

4.19.7. Where oxidation-reduction potential (ORP) controllers are used, the operator must perform water testing, calibration checks, inspection, cleaning of sensor probes, and chemical injectors in accordance with the manufacturer's recommendations. If specific manufacturer's recommendations are not made, the operator must perform these tasks at least weekly.

4.20. Safety Requirements and Lifesaving Equipment.

4.20.1. **Lifeguards Required.** Lifeguard service must be provided at all times the pool is open to the public if direct fees are charged or if public funds support the operation of the pool. If a pool is normally exempt from the requirement to provide lifeguard services but is used for some purpose that would require lifeguard services, then lifeguard services must be required during the period of that use.

4.20.2. A lifeguard must:

- (i) Be trained and certified by the American Red Cross, or an equivalent program as approved by the Department in professional-level skills, in Cardio Pulmonary Resuscitation (C.P.R.); AED use and other resuscitation skills consistent with the 2010 American Heart Association Guidelines for Cardio Pulmonary Resuscitation and Emergency Cardiovascular Care; and first aid consistent with the 2010 American Heart Association Guidelines for First Aid.
- (ii) Have full authority to enforce all rules of safety and sanitation.

4.20.3. A lifeguard must not have any other duties to perform other than the supervision and safety of bathers while he or she is assigned life guarding duties.

4.20.4. Where lifeguard service is required, the number of lifeguards must be sufficient to allow for continuous supervision of all bathers, and surveillance over total pool floor areas.

4.20.5. Lifeguards must be relieved in the rotation of lifeguarding responsibilities at least every 30 minutes with a work break of at least 10 minutes every hour.

4.20.6. **Elevated Lifeguard Station.** Areas of a public pool with water depth greater than six feet or a width greater than forty feet and a depth greater than four feet where a lifeguard is required, must provide for a minimum number of elevated lifeguard chairs in accordance with Table 2. Lifeguard chairs must be located to provide a clear unobstructed view of the pool bottom by lifeguards on duty.

4.20.7. Where lifeguard service is required, the facility must have a readily accessible area designated and equipped for emergency first aid care.

4.20.8. **Lifesaving and Safety Equipment.** A pool must have at least one unit of lifesaving equipment. One unit of lifesaving equipment must consist of the following: a Coast Guard-approved ring buoy with an attached rope equal in length to the maximum width of the pool plus 10 feet and a life pole or shepherd's crook-type pole with blunted ends and a minimum length of 12 feet. The facility operator may substitute a rescue tube for a ring buoy, a shepherd crooks and a life pole where lifeguard service is provided. Additional units must be provided at the rate of one for each 2,000 square feet of surface area or fraction thereof. The operator of a pool that has

lifeguard services must provide at least one backboard designed with straps and head stabilization capability. See Table 2 below.

TABLE 2: SAFETY EQUIPMENT

	POOLS WITH LIFEGUARD	POOLS WITH NO LIFEGUARD
Elevated Chairs:	1 per 2,000 sq. ft. of surface area or fraction thereof	None
Backboard:	1 per Facility	None
Room for Emergency Care:	1 per Facility	None
Ring Buoy with an attached rope equal in length to the maximum width of the pool plus 10 feet:	<u>None</u>	1 per 2,000 sq. ft. or fraction.
Rescue Tube (Used as a substitute for ring buoys when lifeguards are present.):	1 per 2,000 sq. ft. or fraction.	None
Life Pole or Shepherds Crook:	<u>None</u>	1 per 2,000 sq. ft. or fraction.
First Aid Kit:	1 per Facility	1 per Facility

4.20.9. Lifesaving equipment must be mounted in readily accessible, conspicuous places around the pool deck. It must be maintained in good repair and operable condition. Lifesaving equipment may not be used or removed by anyone for any reason other than its intended purpose.

4.20.10. **First Aid Kit.** A public pool must be equipped with a first aid kit which includes a minimum of the following items:

- (i) 2 Units eye dressing packet;
- (ii) 2 Units triangular bandages;
- (iii) 1 CPR shield;
- (iv) 1 scissors;
- (v) 1 tweezers;
- (vi) 6 pairs disposable medical exam gloves; and

- (vii) Assorted types and sizes of the following: self-adhesive bandages, compresses, roller-type bandages, and bandage tape.

4.20.11. The operator must keep the first-aid kit filled, available, and ready for use.

4.21 **Lighting, Ventilation, and Electrical Requirements.**

4.21.1. **Lighting.** An outdoor pool must not be used for night swimming without underwater lighting. The Department may approve an outdoor pool for night swimming if the operator can demonstrate to the Department that a 6-inch diameter black disk on a white background placed in the deepest part of the pool can be clearly observed from the pool at night. The Department must keep a record of this approval on file. The Registered Pool Operator must keep a record of this approval on file at the facility.

4.21.2. **Illumination.** Where night swimming is permitted, artificial lighting must be provided so that all areas of the pool are visible. Underwater lights must provide illumination equivalent to 0.5 watt of incandescent lamp light per square foot, of pool water surface area. Underwater lighting requirement maybe waived if overhead lighting provides a minimum of 15-foot candle illumination over the entire pool surface.

4.21.3. **Deck Lighting.** Where night swimming is permitted, area lighting must be provided for the deck areas and directed away from the pool surface as practical to reduce glare. The luminance must be at least 5 horizontal foot candles of light per square foot of deck area, but less than the luminance level for the pool shell.

4.21.4. **Electrical.** Electrical wiring must conform to Article 680 of the National Electrical Code, as incorporated under Utah Code Ann. §§ 15A-1-101 to 15A-6-202, State Construction and Fire Codes Act. Wiring must not be routed under a pool or within the area extending 5 feet horizontally from the inside wall of the pool. The Department may deny the installation and use of any electrical appliance, device, or fixture, except in the following circumstances:

- (i) For underwater lighting;
- (ii) Electrically powered automatic pool shell covers; and
- (iii) Competitive judging, timing, and recording apparatus.

4.21.5. **Ventilation.** Buildings containing indoor pools, pool-equipment rooms, access spaces, bathhouses, dressing rooms, shower rooms, and toilet spaces must be ventilated in accordance with American Society of Heating, Refrigeration, and Air-Conditioning Engineers Standard 62.1 2016, which is incorporated and adopted by reference.

4.21.6. If any part of the equipment room is below grade, access by stairway and suitable drainage, by sump pump if necessary, must be provided. If an open stairwell is used, ventilation through a fully louvered door and a permanently open louvered vent on

at least one side of the room is required. Enclosed stairways must have louvered vents on three sides of the room or an exhaust fan.

4.22. Dressing Rooms – General Construction and Design.

- 4.22.1. Where dressing rooms are provided, a separate dressing room must be provided for each gender. The entrances and exits must be designed to break the line of sight into the dressing areas from other locations.
- 4.22.2. The operator must maintain all areas and fixtures within dressing rooms in an operable, clean, and sanitary condition.
- 4.22.3. Dressing rooms must be constructed of materials that have smooth non-slip surfaces and are impervious to moisture.
- 4.22.4. Floor must slope to a drain and be constructed to prevent accumulation of water.
- 4.22.5. Carpeting is prohibited on dressing room floors.
- 4.22.6. Junctions between walls and floors must be coved.
- 4.22.7. Partitions between dressing cubicles must be raised at least 10 inches above the floor or must be placed on continuous raised masonry or concrete bases at least 4 inches high.
- 4.22.8. Lockers must be set either on solid masonry bases 4 inches high or on legs elevating the bottom locker at least 10 inches above the floor.
- 4.22.9. Lockers must have louvers for ventilation.
- 4.22.10. At least one covered waste receptacle must be provided in each dressing room.

4.23. Restroom and Shower Facilities

- 4.23.1. The facility must provide patrons access to a restroom with shower facilities for each gender in accordance with Table 3. These must be:
 - (i) Located with convenient access for bathers;
 - (ii) Located no further than 150 feet from the pool deck; and
 - (iii) Designed to break the line of sight into the restroom and shower facilities.
- 4.23.2. The minimum number of toilets and showers must be based upon the designed maximum bather load. A minimum of two unisex facilities or one for each gender, must be provided with access to the pool deck.

- (i) Required numbers of fixtures must be based upon 50 percent of the total number of bathers being male and 50 percent being female, except where the facility is used exclusively by one gender.
 - (ii) The minimum number of sanitary fixtures must be in accordance with Table 3. The Department may reduce the number of fixtures required by considering the number of fixtures available within 150 feet of the pool deck. The minimum number of toilets with showers must not be reduced to less than two for unisex, or one for each gender, except where the bather load is 25 or less, in which case the minimum may be one unisex restroom with shower facility.
- 4.23.3. Hand sinks must be provided on the basis of one for each toilet up to four, then one for each two additional toilets.
- 4.23.4. The facility must provide showers for each gender and must enclose these showers for privacy. A minimum of one shower head for each gender must be provided for each 50 bathers or fraction thereof.
- 4.23.5. Potable water must be provided at all shower heads. Water heaters and thermostatically controlled mixing valves must be inaccessible to bathers and must be capable of providing 2 gallons per minute of 90-degree Fahrenheit water to each shower head for each bather.
- 4.23.6. If unisex facilities are provided, they may count toward the total number of required fixtures in this section as long as the unisex facilities are provided in multiples of two, unless as specified in section 4.23.2 (i) of this Regulation.
- 4.23.7. Soap must be dispensed at all hand sinks and showers.
- (i) Soap dispensers must be constructed of metal or plastic.
 - (ii) Use of bar soap or any communal soap item is prohibited.
 - (iii) Disposable towels or air dryers must be provided for all hand sinks.
- 4.23.8. Toilet paper must be provided at each toilet.
- 4.23.9. Fixtures must be designed so that they may be readily cleaned. Fixtures must withstand frequent cleaning and disinfecting.
- 4.23.10. The operator must maintain all areas and fixtures within restroom facilities in an operable, clean, and sanitary condition.
- 4.23.11. Restroom and shower facilities must be constructed of materials that have smooth, non-slip surfaces and are impervious to moisture.
- 4.23.12. Floors must slope to a drain and be constructed to prevent accumulation of water.

4.23.13. Carpeting must not be installed on restroom and shower floors.

4.23.14. Junctions between walls and floors must be covered.

4.23.15. At least one covered waste can must be provided in each restroom.

TABLE 3: SANITARY FIXTURE MINIMUM REQUIREMENT

TOILETS*	
Male	Female
1: 1 to 25	1: 1 to 25
2: 26 to 75	2: 26 to 75
3: 76 to 125	3: 76 to 125
4: 126 to 200	4: 126 to 200
5: 201 to 300	5: 201 to 300
6: 301 to 400	6: 301 to 400
Over 400, add one fixture for each additional 200 males or 150 females.	
*Where urinals are provided, one toilet less than the number specified must be provided for each urinal installed, except the number of toilets in such cases must not be reduced to less than one half of the minimum specified.	

4.24. Disinfection and Quality of Water.

4.24.1. **Disinfection Process.** A pool must be continuously disinfected by a process which:

- (i) Is registered with the EPA as a disinfecting process or disinfectant product for water.
- (ii) Imparts a disinfectant residual which may be easily and accurately measured by a field test procedure appropriate to the disinfectant in use.
- (iii) Is compatible for use with other chemicals normally used in pool water treatment.
- (iv) Does not create harmful or deleterious effects on bathers if used according to manufacturer's specifications.
- (v) Does not create an undue safety threat if handled, stored, and used according to manufacturer's specifications.

- (vi) The active disinfecting agent used must meet the concentration levels listed in Table 4 for all circumstances, bather loads, and the pH level of the water.
- (vii) At no time may the concentration level of free available chlorine reach a level above ten parts per million while the facility is open to bathers.
- (viii) Products used to treat or condition pool water must be used according to the manufacturers.

4.24.2. **Testing Kit.** An easy to operate pool-side disinfectant testing kit, compatible with the disinfectant in use and accurate to within 0.5 ppm, must be provided at each pool.

- (i) If chlorine is the disinfectant used, it must be tested by the diethyl-p-phenylene diamine, leuco crystal violet test, or other test method approved by the Department.
- (ii) If cyanuric acid or stabilized chlorine is used, a testing kit for cyanuric acid, accurate to within 10.0 ppm must be provided.
- (iii) Expired test kit reagents must not be used.

4.24.3. If cyanuric acid is used to stabilize the free residual chlorine, or if one of the chlorinated isocyanurate compounds is used as the disinfecting chemical, the concentration of cyanuric acid in the water must not exceed 100 ppm.

4.24.4. The difference between the total chlorine and the free chlorine in a pool must not be greater than 0.5 ppm. If the concentration of combined residual chlorine is greater than 0.5 ppm the pool water must be breakpoint chlorinated to oxidize and reduce the concentration of combined chlorines.

4.24.5. Total dissolved solids must not exceed 1,500 ppm over the startup total dissolved solids of the pool water.

4.24.6. Total alkalinity must be with the range from 100-125 ppm for plaster-lined pools, 80-150 ppm for a spa pool lined with plaster, and 125-150 ppm for a pool lined with other approved construction materials.

4.24.7. A calcium hardness of at least 200 ppm must be maintained.

4.24.8. The saturation index value of the pool water must be within the range of positive 0.3 and minus 0.3. The saturation index must be calculated in accordance with Table 5.

TABLE 4: DISINFECTANT LEVELS AND CHEMICAL PARAMETERS

	POOLS	SPAS	SPECIAL PURPOSE
Stabilized Cl ₂ (ppm)			
pH 7.2 to 7.6	2.0*	3.0*	2.0*
pH 7.7 to 8.0	3.0*	5.0*	3.0*
Non-Stabilized Cl ₂ (ppm)			
pH 7.2 to 7.6	1.0*	2.0*	2.0*
pH 7.7 to 8.0	2.0*	3.0*	3.0*
Bromine (ppm)	4.0*	4.0*	4.0*
Iodine (ppm)	1.0	1.0	1.0
pH	7.2 to 7.8	7.2 to 7.8	7.2 to 7.8
Total Dissolved Solids over startup TDS (ppm)	1,500	1,500	1,500
Cyanuric Acid (ppm)	<100	<100	<100
Calcium Hardness (ppm)	200*	200*	200*
Total Alkalinity (ppm) (plaster pools) 125 to 150 (painted or fiberglass pools)	100 to 125	80 to 150	100 to 125
Saturation Index (see Table 5)	+/- 0.3	+/- 0.3	+/- 0.3
Chloramines (combined Cl ₂ residual, ppm)	0.5	0.5	0.5

*Minimum Value

4.24.9. **Water Clarity.** Water clarity must be maintained so that the drain grates or covers in the deepest part of the pool are readily visible at all times. The facility must be closed immediately if this requirement is not met.

4.24.10. **Pool Water Sampling and Testing.** A water sample must be collected from a pool at least once per month or as otherwise directed by the Department while it is in use and must be submitted to a laboratory approved by the Department to perform Safe Drinking Water Program testing. A seasonal public pool during the off season and any public pool while it is temporarily closed, if the pool is closed for an interval exceeding 15 days, is exempt from the requirement for monthly sampling.

- (i) The operator or Department must have the laboratory analyze the sample for total coliform and heterotrophic plate count using methods allowed under Utah Administrative Code Rule 444-14, Rule for the Certification of Environmental Laboratories.
- (ii) The testing laboratory must promptly report the results of such analysis to the Department and to the facility operator within five working days. When requested, the lab or the Department must mail the results of such analysis to the Utah Department of Health.

4.24.11. A pool water sample fails bacteriological quality standards if it:

- (i) Contains more than 200 bacteria per milliliter, as determined by the heterotrophic plate count; or
- (ii) Shows a positive test for presence of coliform or contains more than 1.0 coliform organisms per 100 milliliters.

4.24.12. Not more than 1 of 5 samples may fail bacteriological quality standards. Failure of any bacteriological water quality sample must require submission of a second sample within one-lab receiving day after the sample report has been received.

4.24.13. Pool Water Temperatures.

- (i) Pool water temperatures for general use should be within the range of 82° Fahrenheit to 86° Fahrenheit.
- (ii) The water in a pool dedicated primarily for swim training and high exertion activities must be within the temperature range of 78° Fahrenheit to 82° Fahrenheit to reduce the safety threat associated with hyperthermia.
- (iii) The minimum water temperature for a pool is 78° Fahrenheit.
- (iv) The Department may exempt the pool water temperature requirements for a special purpose pool including a cold plunge pool but must not exempt any temperatures above 104° Fahrenheit, the maximum hot water temperatures allowed for a spa pool.

TABLE 5: CHEMICAL VALUES AND FORMULA FOR CALCULATING SATURATION INDEX

Formula for Calculating the Saturation Index: $SI = pH + TF + CF + AF - TDSF$
 where SI means saturation index, TF means temperature factor, CF means calcium factor, AF means alkalinity factor, TDSF means Total Dissolved Solids factor.

Temperature		Calcium Hardness		Total Alkalinity		Total Dissolved Solids	
deg. F	TF	ppm	CF	ppm	AF	mg/l	TDSF
32	0.0	5	0.3	5	0.7	0 to 999	12.1
37	0.1	25	1.0	25	1.4	1000 to 1999	12.2
46	0.2	50	1.3	50	1.7	2000 to 2999	12.3
53	0.3	75	1.5	75	1.9	3000 to 3999	12.4
60	0.4	100	1.6	100	2.0	4000 to 4999	12.5
66	0.5	150	1.8	150	2.2	5000 to 5999	12.55
76	0.6	200	1.9	200	2.3	6000 to 6999	12.6
84	0.7	300	2.1	300	2.5	7000 to 7999	12.65
94	0.8	400	2.2	400	2.6	Ea. Add. 1000	Add .05
105	0.9	800	2.5	800	2.9		
128	1.0	1,000	2.6	1,000	3.0		

If the SATURATION INDEX is 0, the water is chemically in balance.
If the INDEX is a minus value, corrosive tendencies are indicated.
If the INDEX is a positive value, scale-forming tendencies are indicated.
EXAMPLE: Assume the following factors:
pH 7.5, Temperature 80 degrees F, 19 degrees C, Calcium Hardness 235
Total Alkalinity 100, and Total Dissolved Solids 999
1- pH - 7.5
2- TF - 0.7
3- CF - 1.9
4- AF - 2.0
TOTAL: $7.5 + 0.7 + 1.9 + 2.0 - 12.1 = 0.0$
This water is balanced.

4.25. **Cleaning Pools.**

- 4.25.1. The Registered Pool Operator must clean the bottom of the pool as often as needed to keep the pool free of visible dirt.
- 4.25.2. The pool water surface must be cleaned as often as needed to keep the pool free of visible scum or floating matter.
- 4.25.3. Pool shell surfaces, handrails, floors, walls, and ceilings of rooms enclosing pools, dressing rooms and equipment rooms, must be kept clean, sanitary, and in good repair.
- 4.25.4. After a fecal or bodily fluid incident occurs, the Registered Pool Operator must follow the Centers for Disease Control (CDC) guidelines “Fecal Accident Response Recommendations for Pool Staff and Notice to Readers—Revised Guidance for Responding to Fecal Accidents in Disinfected Swimming Venues.”
 - (i) The operator must include in the records information about all fecal matter releases; date, time, and where the fecal matter was discovered; whether the fecal matter was loose or solid; and the responses taken. The operator must maintain the records for a minimum of two years.
 - (ii) The required CDC control protocol for hyper chlorination for a loose fecal release may be altered if an operator is able to achieve a 99.9 percent kill or removal of cryptosporidium oocysts in the entire pool system by another method such as ultraviolet light, ozone, or enhanced filtration prior to allowing bathers to reenter the pool.

4.26. **Signage.**

- 4.26.1. Unless otherwise provided, a sign must be posted in the immediate vicinity of the pool, stating the location of the nearest telephone and providing emergency telephone numbers, which must include 911 or other local emergency numbers.

- 4.26.2. If a telephone is not available at poolside, emergency telephone numbers must be provided in a form that can be taken to a telephone.
- 4.26.3. Where no lifeguard service is provided in accordance with section 4.20.1 of this Regulation, a warning sign must be placed in plain view and state: “WARNING – NO LIFEGUARD ON DUTY. BATHERS SHOULD NOT SWIM ALONE.” Printed in four-inch high letters. In addition, the sign must also state: “CHILDREN 14 AND UNDER SHOULD NOT USE POOL WITHOUT RESPONSIBLE ADULT SUPERVISION.”
- 4.26.4. Areas of a pool where diving is not permitted must have the words "NO DIVING" printed in block letters, or the international “No Diving” icon, or both. The block letters or icons must be at least 4 inches in height, in a contrasting color on the deck, and located within 16 inches of the pool side edge of the coping stone.
- (i) The spacing between each warning must be no greater than 25 feet.
 - (ii) Where the icon is used alone, at least one “NO DIVING” sign must be posted in plain view within the enclosure.
- 4.26.5. **Personal Hygiene and Behavior Signage.** Legible and clearly visible placards stating the following rules of personal hygiene and behavior must be posted in the pool enclosure, dressing rooms, and lifeguard rooms where applicable.
- (i) A bather using the facility must take a cleansing shower before entering the pool enclosure. A bather leaving the pool to use the toilet must take a second cleansing shower before returning to the pool enclosure.
 - (ii) A person having a communicable disease transmissible by water must be excluded from pools. A person having any exposed sub-epidermal tissue, including open blisters, cuts, or other lesions may not use a pool. A person who has or has had diarrhea within the last two weeks caused by an unknown source or from any communicable or fecal-borne disease may not enter any public pool.
 - (iii) Any child under three years old, any child not toilet trained, and anyone who lacks control of defecation must wear a water-resistant swim diaper and waterproof swimwear. Swim diapers and waterproof swimwear must have waist and leg openings fitted such that they are in contact with the waist or leg around the entire circumference.
 - (iv) Running, boisterous, or rough play, except supervised water sports is prohibited.
 - (v) Diapers must be changed in restrooms or changing stations not at poolside. The person or persons who change the diaper must wash their hands thoroughly with soap before returning to the pool. The diapered person must undergo a cleansing shower before returning to the pool.

4.27. **Pool Facility.**

- 4.27.1. Visitors, spectators, or animals must not be allowed within 10 feet of the pool edge. Service animals are exempt from this requirement.
- 4.27.2. Food or drink must be prohibited within ten feet of the pool edge. All beverages within the pool compound must be in non-breakable containers.
- 4.27.3. Trash containers must be provided. The entire pool facility_area must be kept free of litter and maintained in a clean, sanitary condition.
- 4.27.4. Diapers must only be changed in restrooms or changing stations.
- 4.27.5. Persons who change the diaper must wash their hands thoroughly with soap and water_before returning to the pool. The diapered person must undergo a cleansing shower before returning to the pool.

4.28. **Cryptosporidiosis.**

- 4.28.1. The Director may issue cryptosporidiosis watches or cryptosporidiosis warnings as methods of intervention for likely or indicated outbreaks of cryptosporidiosis.
- 4.28.2. If the Director issues a restriction on the use of public pools by certain persons as part of the cryptosporidium warning the Registered Pool Operator must restrict persons within that segment of the population from using the facility.
- 4.28.3. If the Department determines that a pool is a cryptosporidiosis threat to public health, the Department may order the pool to close. The owner or operator of the pool must not reopen until the Department rescinds the closure order.

4.28.4 **Cryptosporidiosis Watches.**

- (i) The Director may issue a cryptosporidiosis watch if there is a heightened likelihood of a cryptosporidiosis outbreak.
- (ii) When a cryptosporidiosis watch has been issued, the operator of any public pool must post a notice sign that meets the requirements of this section, the standard for “notice” signs established in ANSI Z535.2-2002, which is adopted by reference, and the approval of the Department to assure compliance with this section and the ANSI standard. An Adobe Acrobat.pdf version of the sign that meets the requirements of this section and the ANSI standard for 10-foot viewing is available from the Department. The notice sign must be placed so that all patrons are alerted to the cryptosporidium-targeted requirements prior to deciding whether to use the swimming pool. The sign must be at least 17 inches wide by 11 inches high. The sign may need to be larger, depending on the placement of the sign, to meet the ANSI standard.

- a. Centered immediately below the blue panel, the words “CRYPTO DISEASE PREVENTION” in capital letters must be visible.
- b. The body of the notice sign must be in upper case letters at least 0.5 inches high and include the following four bulleted statements in black letters:
 - All with diarrhea in the past 2 weeks must not use the pool.
 - All users must shower with soap to remove all fecal material prior to pool entry and after using the toilet or a diaper change.
 - All less than 3 years or who wear diapers must wear a swim diaper and waterproof swimwear. Diapers may only be changed in restrooms or changing stations.
 - Keep pool water out of your mouth.

4.28.5. **Cryptosporidiosis Warnings.** The Director may issue a cryptosporidiosis warning if there have been reports of cryptosporidiosis above the background level reported for the disease.

- (i) When a cryptosporidiosis warning has been issued, the operator of any public pool must post a notice sign that meets the requirements of section 4.28.4(ii)a and b of this Regulation.
- (ii) The Director must include the geographic area and pool type covered in the warning and may restrict certain persons from using public pools.
- (iii) Each Registered Pool Operator of a public pool subject to the warning must, at a minimum, implement the following cryptosporidium counter measures:
 - a. Maintain the disinfectant concentration within the range between two ppm (four ppm for bromine) and five ppm (10 ppm for bromine) unless the label on the product states otherwise;
 - b. Maintain the pH between 7.2 and 7.5; and
 - c. Must reduce the maximum cyanuric acid level to 30 ppm.
- (iv) The owner or Registered Pool Operator of a public pool must implement any additional cryptosporidium countermeasures listed below to achieve at least a 99.9 percent destruction or removal of cryptosporidium oocysts twice weekly, except as provided in section 4.25.4(ii) of this Regulation.
- (v) Must achieve Hyperchlorination using sodium hypochlorite or calcium hypochlorite to achieve a concentration multiplied by time (CT) value of 15,300 ppm minutes. Table 6 lists examples of chlorine concentrations and time periods that may be used to achieve the required CT value. The

operator must not allow anyone to use the pool if the chlorine concentration exceeds 10 ppm. The operator of any public pool not required to have a lifeguard in section 4.20.1 of this Regulation must hyperchlorinate at least once weekly.

- (vi) A full flow ultraviolet treatment system must meet the requirements of NSF/ANSI 50-2007, which is incorporated by reference. The owner or operator must ensure that the system is installed and operated according to the manufacturer's recommendations. The owner or operator must obtain, from the manufacturer of the system, documentation of third-party challenge testing that the system can achieve a single pass 99.9 percent inactivation of cryptosporidium or the bacteriophage MS2 at the pool design flow rate and during normal operating conditions. The owner or operator must maintain and make available for inspection the manufacturer's documentation.
- (vii) An ozone treatment system must achieve a CT value of 7.4 and a flow-through rate at least four times the volume of the pool every three and a half days. The system must meet the requirements of National Sanitation Foundation standard NSF/ANSI 50-2007, which is incorporated by reference. The owner or operator must ensure that the system is installed and operated according to the manufacturer's recommendations.
- (viii) A cryptosporidium oocyst-targeted filter system installed and operated according to the manufacturer's recommendations. The filter must meet the requirements of section 4.18 of this Regulation. The owner or operator must obtain from the manufacturer of the system documentation of third-party challenge testing that the system can achieve a single pass 99.9 percent reduction of particles in the range of 4 to 6 microns or cryptosporidium oocysts at the pool design flow rate and normal operating conditions. The owner or operator must maintain and make available for inspection the manufacturer's documentation.
 - a. A system approved by the Department. The Department's approval of a system for use as an alternative must be based on the system's documented ability to:
 - i. Achieve cryptosporidium removal or inactivation to a level at least equivalent to the requirements in 4.28.5(iv)
 - ii. Assure safety for swimmers and pool operators; and
 - iii. Comply with all other applicable rules and federal regulations.

TABLE 6: CHLORINE CONCENTRATION AND CONTACT TIME TO ACHIEVE CT = 15,300

Chlorine Concentration	Contact Time
10 ppm	15,300 minutes (255 hours)
10 ppm	1,530 minutes (25.5 hours)
20 ppm	765 minutes (12.75 hours)

4.29. **Special Purpose Pools.** Special purpose pools must meet all applicable requirements of all sections in addition to those of this section as they apply to special design features and uses of special purpose pools.

4.29.1. Special purpose pool projects require consultation with the Department in order that consideration may be given to areas where potential problems exist.

4.29.2. The Department must require such measures as deemed necessary to assure the health and safety of special purpose pool patrons.

4.29.3. **Hydrotherapy Pools.**

- (i) A hydrotherapy pool must at all times comply with Health Regulation #2, sections 4.1.6 and 4.1.7 Registered Pool Operator, section 4.24 Disinfection and Quality of Water, and section 4.25 Cleaning Pools unless it is drained, cleaned, and sanitized after each individual use.
- (ii) A hydrotherapy pool must not be required to meet all other requirements of Health Regulation #2, necessary only if the use of the hydrotherapy pool is restricted to therapeutic uses and is under the continuous and direct supervision of licensed physical therapists, occupational therapists, or athletic trainers.
- (iii) The Department may enter and examine the use of hydrotherapy pools to respond to complaints, to ensure that use of the pool is being properly supervised, to examine records of testing and sampling, and to take samples to assure that water quality and cleanliness are maintained.
- (iv) The Director may grant an exception to section 4.29.3 (i) if the operator of the hydrotherapy pool can demonstrate that the exception will not compromise pool sanitation or the health or safety of users.

4.29.4. **Instructional Pools**

- (i) Instructional pools must be regulated per Utah Administrative Code R392-302, Design, Construction and Operation of Public Pools.

4.29.5. Interactive Water Feature.

- (i) All parts of the interactive water feature must be designed, constructed, maintained, and operated so there are no slip, fall, or other safety hazards and must meet the standards of Utah Code Ann. §§ 15A-1-101 to 15A-6-202, State Construction and Fire Codes Act.
- (ii) Interactive water feature nozzles that spray from the ground level must be flush with the ground, with openings no greater than one-half inch in diameter. Spray devices that extend above ground level must be high enough to be clearly visible and must not create a tripping hazard.
- (iii) Water discharged from all interactive water feature fountain or spray features must not pond on the feature floor and must flow by gravity through a main drain fitting to a below-grade sump or collection system that discharges to a collector tank.
- (iv) All interactive water feature foggers and misters that produce finely atomized mists must be supplied directly from a potable water source and not from the underground reservoir.
- (v) A continuous, unobstructed deck at least 3 feet wide as measured from the edge of the splash zone must extend completely around the interactive water feature. Areas adjacent to the splash zone must be sloped away from the interactive water feature to deck drains or other approved surface water disposal systems at a minimum of two percent.
- (vi) The interactive water feature must have an automated oxidation reduction potential (ORP) and pH controller installed and in operation whenever the feature is open for use. The controller must be capable of maintaining disinfection and pH levels within the requirements for special purpose pools listed in Table 4. In addition, an approved secondary disinfection system must be installed and in operation whenever the feature is open for use.
- (vii) A sign must be posted in the immediate vicinity of the interactive water feature that includes the following:
 - a. The word “CAUTION” centered at the top of the sign.
 - b. No running on or around the interactive water feature.
 - c. Children under the age of 12 must have adult supervision.
 - d. No food, drink, glass, or pets are allowed on or around the interactive water feature.

- e. For the health of all users, restrooms must be used for the changing of diapers.
- (viii) If night operation of the interactive water feature is proposed, light must be provided on the pool deck and the water feature area as required in section 4.21.3 of this Regulation.
- (ix) **Hydraulics.**
- a. The interactive water feature filter system must be capable of filtering and treating the entire water volume of the water feature within 30 minutes.
 - b. The interactive water feature filter system must draft from the collector tank and return filtered and treated water to the tank via a minimum of four equally spaced inlet fittings. The flow rate through these fittings must not exceed 20 gpm.
 - c. The interactive water feature recirculation system must be on a separate loop and not directly interconnected with the interactive water feature pump.
 - d. The suction intake of the interactive water feature pump in the underground reservoir must be located adjacent to the circulation return line and must be located to maximize uniform circulation of the tank.
 - e. The interactive water feature pump must draft from the collector tank.
 - f. An automatic water level controller must be provided for the interactive water feature, and the drinking water line that supplies the feature must meet the requirements of section 4.2 of this Regulation.
 - g. The flow rate through the feature nozzles of the interactive water features must be such as not to harm the patrons and must not exceed 20 feet per second. The minimum size of the interactive water feature sump or collector tank must be equal to the volume of 3 minutes of the combined flow of all feature pumps and the filter pump. Access lids or doors must be provided to the sump or collector tank. The lids or doors must be sized to allow easy maintenance and must provide security from unauthorized access. Stairs or a ladder must be provided as needed to ensure safe entry into the tank for cleaning and inspection.
 - h. The suction intake from the interactive water feature recirculation pump must be located in the lowest portion of the underground

reservoir.

- i. A filter circulation system must be provided for the interactive water feature and must be separate from the feature pump system except that both systems can draw water from a common drain pipe if the drain and pipe are sized to handle the flow of all pumps.
 - j. A means of vacuuming and completely draining the interactive water feature tank must be provided.
- (x) An interactive water feature is exempt from:
- a. The wall requirement of section 4.8 of this Regulation;
 - b. The ladder, recessed step, stair, and handrail requirements of section 4.10 of this Regulation;
 - c. The access barrier requirements of section 4.12 of this Regulation;
 - d. The outlet requirements of section 4.16 of this Regulation except any submerged outlet that may create an entrapment hazard to users of the feature must conform to the standards of ANSI/APSP-16 2011;
 - e. The overflow gutter and skimming device requirements of section 4.17 of this Regulation;
 - f. The safety and lifesaving requirements of section 4.20 of this Regulation, except that an interactive water feature must be equipped with a first aid kit as required by sections 4.20.10 and 4.20.11 of this Regulation;
 - g. The restroom and shower facility requirements of section 4.23 of this Regulation as long as restrooms with toilets, hand sinks and changing tables are available within 150 feet. Hand sinks must be provided with soap dispensers.
 - h. The pool water temperature requirements of section 4.24.13 of this Regulation.
 - i. The diving area requirements of section 4.9.6 of this Regulation, except section 4.26.4(i) and (ii), may be required if the Department determines that a diving risk exists;
 - j. The depth marking and safety rope requirements of section 4.13 of this Regulation;

- k. The underwater lighting requirements of sections 4.21.1 and 4.21.2 of this Regulation;
 - l. The bather-load requirements of section 4.5 of this Regulation; and
 - m. The pool color requirements of section 4.4.11 of this Regulation.
- (xi) All interactive water features must be constructed with a collection zone that meets the requirements of section 4.4 of this Regulation. Vinyl liners that are not bonded to a collection zone surface are prohibited. A vinyl liner that is bonded to a collection zone must have at least a 60-millimeter thickness. Sand, clay, or earth collection zones are prohibited.
- a. The collection zone material of an interactive water feature must withstand the stresses associated with the normal uses of the interactive water feature and regular maintenance. The collection zone structure and associated tanks must withstand without any damage to the structure, the stresses of complete emptying of the interactive water feature and associated tanks without shoring or additional support.
 - b. The collection zone of an interactive water feature must be designed and constructed in a manner that provides a smooth, easily cleanable, non-abrasive, and slip resistant surface. The collection zone surfaces must be free of cracks or open joints with the exception of structural expansion joints or openings that allow water to drain to the collector tank. Openings that drain to the collector tank must not pass a one-half inch sphere. The owner of a non-cementitious interactive water feature must submit documentation with the plans required in section 4.4.8 of this Regulation that the surface material has been tested and passed by an American National Standards Institute (ANSI) accredited testing facility using one of the following standards that is appropriate to the material used:
 - i. For pools built with prefabricated pool sections or pool members, ISO 19712-1:2008 – Plastics – Decorative solid surfacing materials – Part 1: Classification and specifications; or
 - ii. A standard that has been approved by the Department based on whether the standard is applicable to the surface and whether it determines compliance with the requirements of section 4.4 of this Regulation.

4.29.6 Spa Pools.

- (i) A spa pool must have a maximum depth of 4 feet. The Department may grant exceptions to the maximum depth requirement for a spa pool designed for special purposes, such as instruction, treatment, or therapy.
- (ii) The Department may exempt a spa pool from the depth marking requirement if the spa pool owner can successfully demonstrate to the Department that bather safety is not compromised by the elimination of the markings.
- (iii) **Bather Load Capacity.** The maximum bather load of a spa pool must be ten square feet of pool water surface area for each bather.
- (iv) **Spa Design.** The spa's bottom step must have a rise of 14" from the spa floor if it serves as a bench or seat.
- (v) **Spa Turnover.** A spa pool must have a minimum of one turnover every 30 minutes.
- (vi) The circulation lines of jet systems and other forms of water agitation used in a spa must be independent and separate from the circulation, filtration, and heating systems.
- (vii) Filtration system inlets must be wall-type inlets and must be spaced a minimum of one per 20 feet, or fraction thereof, of spa perimeter.
- (viii) One skimmer must be provided for each 100 square feet of surface area or fraction thereof.
- (ix) A spa pool must be equipped with oxidation reduction potential controllers which monitor chemical demands, including pH and disinfectant demands, and regulate the amount of chemicals fed into the pool circulation system. A spa pool constructed and approved prior to September 16, 1996 is exempt from this requirement if it is able to meet bacteriological quality as required in section 4.24.12.
- (x) Total alkalinity for a spa pool lined with plaster must range from 80 – 150 ppm. Total alkalinity for a spa pool lined with another approved lining must range from 125 – 150 ppm.
- (xi) An easily legible caution sign must be mounted adjacent to the entrance to the spa or hot tub and must contain the following information:
 - a. The word "CAUTION" centered at the top of the sign in large, bold letters at least two inches in height.

- b. Elderly persons and those suffering from heart disease, diabetes or high blood pressure should consult a physician before using the spa pool.
 - c. Persons suffering from a communicable disease transmissible via water may not use the spa pool.
 - d. Persons using prescription medications should consult a physician before using the spa.
 - e. Individuals under the influence of alcohol or other impairing chemical substances must not use the spa pool.
 - f. Bathers should not use the spa pool alone.
 - g. Pregnant women should not use the spa pool without consulting their physicians.
 - h. Persons should not spend more than fifteen minutes in the spa in any one session.
 - i. Children 14 and under must be accompanied and supervised by at least one responsible adult over the age of 18 years, when lifeguards are not on duty.
 - j. Children under the age of five years are prohibited from bathing in a spa or hot tub.
 - k. Running or engaging in unsafe activities or horseplay in or around the spa is prohibited.
- (xii) Water jets and air induction ports on spa pools must be controlled by an automatic timer which limits the duration of their use to 15 minutes per each cycle of operation. The operator must mount the timer switch in a location which requires the bather to exit the spa before the timer can be reset for another 15-minute cycle or part thereof.
 - (xiii) A spa pool's water temperature must not exceed 104° Fahrenheit. Children under the age of five years are prohibited from bathing in a spa or hot tub.
 - (xiv) **Construction and Materials.** The spa pool shell surface may be of a color other than white or light pastel color.
 - (xv) **Decks and Walkways.**
 - a. Wooden decks, walks, or steps are prohibited.

- b. The Department may grant exceptions for deck construction materials for spa pools or other applications where sealed, clear-heart redwood is used.
- c. A pool deck may be included as part of the spa deck if the pools are separated by a minimum of 5 feet. The Department may grant an exception to deck and pool separation requirements if a spa pool and another pool are constructed adjacent to each other and share a common pool sidewall which separates the two pools.
 - i. The common pool side wall may not exceed 18 inches in width and must have markings indicating “No Walking” or an icon that represents the same provided in block letters at least four inches in height in a contrasting color on the horizontal surface of the common wall.
 - ii. Additionally, the deck space around the remainder of the spa must be a minimum of five feet.
- d. A continuous, unobstructed deck at least three feet wide must be provided around at least 25% or more of the spa. This width may include the coping stone.

(xvi) **Outlets.** Multiple spa outlets must be spaced at least 3 feet apart from each other as measured from the centers of the drain covers or grates or a third drain must be provided and that the separation distance between individual outlets must be at the maximum possible setting.

(xvii) The Department may exempt an acrylic or fiberglass spa from the requirement to locate outlets at the deepest point in the pool if the outlets are located on side walls within three inches of the pool floor, and a wet-vacuum is available on site to remove any water left in the pool after draining.

(xviii) **Lifeguarding and Lifesaving Equipment Requirements.** A spa pool is exempt from the lifeguarding and lifesaving equipment requirements specified in section 4.20.1 through 4.20.9 and must meet the requirements in sections 4.20.10 and 4.20.11 of this Regulation.

(xix) A spa pool must be equipped with at least one handrail for each 50 feet of perimeter, or portion thereof, to designate the point of entry and exit. Points of entry and exit must be evenly spaced around the perimeter of the spa pool and afford unobstructed entry and exit.

4.29.7. Temporary Aquatic Features.

- (i) Temporary aquatic features must meet all applicable requirements of this Regulation in addition to the requirements of this section as they apply to temporary aquatic features. Temporary aquatic features require the

submission of a plan review application at least 30 days prior to the date that the feature will be utilized and consult with the Department prior to approval of the temporary aquatic feature permit.

- (ii) A Temporary Aquatic Feature must not have a depth greater than 4 feet.
 - a. If the event is located at an animal farm or equestrian park, any portion of the event which includes a temporary aquatic feature must be located a minimum of 100 feet away from any accumulated animal waste.
 - b. Lifeguards must be present at each temporary water feature.
 - c. No diving is allowed.
 - d. A Temporary Aquatic Feature is exempt from the following requirements:
 - i. The access barrier requirements of section 4.12 of this Regulation, except that barriers must be in place to restrict unauthorized use and provide for controlled and organized usage.
 - ii. The outlet requirements of section 4.16 of this Regulation, except where a bather may come into close proximity of an outlet in which case the outlet must have a grate or cover that conforms to the standards of ANSI/APSP-16 2011.
 - iii. The pool water temperature requirements of section 4.24.13 of this Regulation.
 - iv. The dressing room and restroom requirements of sections 4.22 and 4.23 of this Regulation except that temporary equivalents must be provided for dressing rooms and restrooms.
 - v. The signage requirements of section 4.26 of this Regulation.
 - vi. The decking requirements of section 4.11 of this Regulation, except space for lifesaving activities must be made available.
 - vii. The safety and lifesaving requirements of section 4.20 of this Regulation, except for the first-aid kit requirements of sections 4.20.10 and 4.20.11.
 - viii. The inlet requirements of section 4.15 of this Regulation, except that inlets must be located to produce uniform circulation.
 - ix. The vacuum cleaning requirements of section 4.14.8 of this Regulation may be waived by the Department if it can be

demonstrated that alternate methods can be employed to keep the bottom of the feature free of debris.

- x. The ladder, step and handrail requirements of section 4.10 of this Regulation, except that reasonable means must be provided for bathers to enter and exit the pool.
- xi. The skimmer system requirements of section 4.17.2 of this Regulation.

4.29.8. **Wading Pools.**

- (i) A wading pool must have a minimum of one turnover per hour and have a separate circulation system.
- (ii) A wading pool must provide inlets around its perimeter at a minimum of one per 20 feet or fraction thereof where wall inlets are utilized.
- (iii) A wading pool must have a minimum of two equally spaced wall inlets,
- (iv) A wading pool must have drainage to the sanitary sewer through a quick opening valve to facilitate emptying the wading pool should accidental bowel discharge or other contamination occur.
- (v) A wading pool must have no connection between the overflow gutters and the main drain.
- (vi) A wading pool must have the equalizer pipe to draw water from its own individual outlet.
- (vii) The deck of a wading pool may be included as part of adjacent pool decks.
- (viii) A wading pool must not exceed a maximum water depth of two feet.

4.29.9. **Water Slide.**

- (i) **Maximum Bather load.** Fifty square feet of pool water surface area must be provided for each bather in a splash pool during maximum load.
- (ii) **Circulation and Reservoirs.** Splash pool circulation systems and overflow reservoirs must meet the following requirements:
 - a. Splash pool overflow reservoirs must have sufficient volume to contain at least two minutes of flow from the splash pool overflow. Splash pool overflow reservoirs must have enough water to ensure that the splash pool will maintain a constant water depth.

- b. The circulation and filtration equipment of a splash pool must be sized to turn over the entire system's water at least once every hour.
- c. Splash pool overflow reservoirs must circulate water through the water treatment system and return when flume supply service pumps are turned off.
- d. Flume pumps and motors must be sized, as specified by the flume manufacturer, and must meet all National Sanitation Foundation, NSF 50 2015, Section 6 standards for centrifugal pool pumps.
- e. Flume supply service pumps must have check valves on all suction lines.
- f. The water slide's splash pool and the overflow reservoir must be designed to prohibit bather entrapment as water flows from the splash pool to the overflow reservoir.
- g. Perimeter overflow gutters are not required directly under slide flumes or along the weirs which separate splash pools and splash pool overflow reservoirs.
- h. Pump reservoir areas must be accessible for cleaning and maintenance.

(iii) **Splash Pool and Walkway Dimensions.** Splash pools must meet the following depth requirements:

- a. The depth of a water slide's splash pool at the end of a horizontally oriented slide flume exit must be at least 3 feet but may be required to be deeper if the design incorporates special features that may increase risks to bathers as determined by the Department.
- b. The depth of a water slide's splash pool must be maintained in front of the flume for a distance of at least 20 feet from which point the splash pool floor may have a constant slope upward. Slopes must not be designed or constructed steeper than a 1 to 10 ratio.
- c. The Department may waive minimum depth and distance requirements for a splash pool and approve a special exit system if the designer can demonstrate to the Department that safe exit from the flume into the splash pool can be assured.
- d. A walkway with a minimum width of four feet must be provided between the splash pool deck and the top of the flume.

- e. Stairways serving the slide must not retain standing water. Stairways must have non-slip surfaces and must conform to the requirements of applicable building codes.

(iv) **Slide Flume Requirements.**

- a. Flumes within enclosed slides must be designed to prevent accumulation of hazardous concentrations of toxic chemical fumes.
- b. All curves, turns, and tunnels within the path of a slide flume must be designed so that body contact with the flume or tunnel does not present an injury hazard. The slide flume must be banked to keep the slider's body safely inside the flume.
- c. The flume must be free of hazards including joints and mechanical attachments, separations, splinters, holes, cracks, or abrasive characteristics. Wall thickness of flumes must be thick enough so that the continuous and combined action of hydrostatic, dynamic, and static loads and normal environmental deterioration will not cause structural failures which could result in injury. The facility operator or owner must ensure that repairs or patchwork maintains original designed levels of safety and structural integrity. All repairs must be performed in accordance with manufacturer's guidelines.
- d. A distance between the side of a slide flume exit and a splash pool side wall must be at least 4 feet.
- e. A distance between nearest sides of adjacent slide flume exits must be at least 6 feet.
- f. The distance between a slide flume exit and the opposite end of the splash pool, excluding steps, must be at least 20 feet.
- g. Multiple-flume slides must have parallel exits or be constructed so that the projected path of their centerlines does not intersect within a distance of less than 8 feet beyond the point of forward momentum of the heaviest bather permitted by the engineered design.
- h. A slide flume exit must provide safe entry into the splash pool. Design features for safe entry into the splash pool include a water backup and a deceleration distance adequate to reduce the slider's exit velocity to a safe speed. Other methods to ensure slider safety may be approved if demonstrated to the Department.
- i. Fifty square feet of pool water surface must be provided for each bather in a slide plunge pool during maximum load.

(v) **Vehicle Slide.**

- a. **Vehicles.** Vehicles, including toboggans, sleds, inflatable tubes, and mats must be designed and manufactured of materials which will not injure or harm riders.
- b. A vehicle slide must maintain the following clearances:
 - i. The distance between the side of the flume exit and the splash pool side wall must be at least 6 feet.
 - ii. The distance between nearest sides of adjacent vehicle slide flume exits must be at least 8 feet.
 - iii. The distance between the flume exit and the opposite end of the splash pool, excluding steps, must be long enough to provide clear, unobstructed travel for at least 8 feet beyond the point of forward momentum of the heaviest bather permitted by the engineered-design.
- c. The operating water depth of a vehicle slide splash pool at the flume exit, must be a minimum of three feet six inches. This depth must be maintained to the point at which forward travel of the vehicle ends. From the point at which forward travel ends, the floor must have a constant upward slope to the pool exit at a ratio not to exceed 1 to 10.
- d. The Department may waive minimum depth and distance requirements for a vehicle slide's splash pool and approve a special exit system if the designer can demonstrate to the Department that safe exit from the flume into the splash pool can be assured.

(vi) **Signage.** A sign must be mounted adjacent to the entrance to a water slide that states at least the following warnings:

- a. The word "CAUTION" centered at the top of the sign in large bold letters at least two inches in height.
- b. No running, standing, kneeling, tumbling, or stopping on flumes, or in tunnel.
- c. No head-first sliding at any time.
- d. The use of a slide while under the influence of alcohol or impairing drugs is prohibited.
- e. Only one person at a time may travel the slide.
- f. Obey instructions of lifeguards and other staff at all times.

- g. Keep all parts of the body within the flume.
- h. Leave the splash pool promptly after exiting from the slide.

In addition, any requirements identified by the manufacturer including not using the water slide if you have medical conditions such as pregnancy, heart conditions, back conditions or musculoskeletal condition, must be posted. Physical characteristics such as speed and splash zone water depth must also be posted.

- 4.29.10. **Wave Pools.** Circulation and filtration systems must be operated at a minimum of one turnover every 6 hours.

4.30. **Closing of a Pool.**

- 4.30.1. Any pool that fails to meet the requirements of this Regulation or is found to be a threat to the public health, safety, or welfare may be closed by the Department under sections 5.4, 7.3, and 7.4.4 of this Regulation.
- 4.30.2. **Placard.** Notice of such closure will be designated by a placard posted by the Department in a conspicuous place and by written notice delivered to the facility.
- 4.30.3. No pool closed and placarded is permitted to be used by humans for bathing or swimming, or for instructional purposes in swimming, diving, or other aquatic activities until written approval is received from the Department.
- 4.30.4. No person is permitted to deface or remove a placard from any public swimming pool that has been closed by the Department. The Department will remove such placard when the violation(s) upon which closing was based has been remedied.

5. **LICENSES, PERMITS, AND REGULATORY FEES**

5.1. The Department may establish and collect appropriate fees for licenses and permits as set out in this Regulation. The Department may collect appropriate fees as set out in this Regulation for the performance of services, including plan reviews. If information on a license or permit application changes, the applicant must notify the Department in writing within 20 calendar days.

5.1.1 **Seasonal Operational Permit Fee.** Applicants for a Seasonal Operational Permit required in section 4.1.1 of this Regulation are required to remit a Seasonal Operational Permit Fee of an amount as provided for or as approved by the Director or Department's Fee Schedule, upon application and at a time of renewal.

5.1.2 **Year-Round Operational Permit Fee.** Applicants for a Year-Round Operational Permit required in section 4.1.1 of this Regulation must remit to the

Department a Year-Round Operational Permit Fee of an amount as provided for or as approved by the Director or Department's Fee Schedule, upon application and at a time of renewal.

5.1.3 Pool Facility Plan Review Fee. A Pool Facility Plan Review Fee of an amount as provided for or as approved by the Director or Department's Fee Schedule, upon application.

5.1.4 Registered Pool Operator Permit Fee. Applicants for a Registered Pool Operator Permit required in section 4.1.6 of this Regulation must remit to the Department a Registered Pool Operator Permit Fee of an amount as provided for or as approved by the Director or Department's Fee Schedule.

5.1.5 Pool Follow-Up Inspection Fee. The Department will charge a follow-up fee when conditions found during an inspection, including construction or pre-opening inspection, or during any sampling, require a follow-up inspection to ensure compliance. The permit holder must remit a Pool Follow-Up Inspection Fee of an amount as provided for or as approved by the Director or the Department's Fee Schedule.

5.2. Late Fees.

5.2.1. The Department may impose upon any party subject to this Regulation penalties and charges for failure to timely pay service and license or permit fees as set out in this Regulation. Attorney's fees and collection fees may also be applied.

5.2.2. Fees unpaid to the Department after one month of the due date will be assessed a penalty of 10% of the outstanding balance. Failure to pay the fees and additional charges after two months of the due date will be assessed an additional penalty of 15% of the outstanding balance including previous penalties. Failure to pay the fees and additional charges after 100 days of the due date will result in suspension of the permit and the right to operate. A \$40.00 charge will be assessed for each returned check.

5.3. Unless otherwise provided for in this Regulation or approved by the Board in the Department's Fee Schedule, all fees collected by the Department are non-refundable. All licenses and permits issued by the Department are non-transferable.

5.4. Suspension or Revocation of License or Permit. The Department may also suspend or revoke licenses and permits or require closure for any of the following reasons:

5.4.1. Failure to post the Operational Permit in a location visible to pool facility users;

5.4.2. Submission of incorrect or false information in the application, plans, or specifications submitted to the Department;

5.4.3. Failure to operate or maintain the pool in accordance with the application, report, plans, or specifications approved by the Department;

- 5.4.4. Failure to submit pool water samples to the Department in accordance with this Regulation;
- 5.4.5. Failure of the owner or operator of a pool establishment to permit or allow the Department to conduct inspections as necessary to determine compliance with this Regulation;
- 5.4.6. Failure to replace existing facilities and equipment with facilities and equipment that comply with this Regulation if the Department directs the replacement in accordance with section 1.3 of this Regulation;
- 5.4.7. Operation of the pool in a way that causes or creates a threat to the public health, safety, or the environment;
- 5.4.8. Violation of this Regulation or any other restrictions or requirements adopted by the Board;
- 5.4.9. Violation of any condition upon which the license or permit was issued;
- 5.4.10. Failure to pay the license or permit fees or any late fees 100 days past the due date; or
- 5.4.11. Failure to supply updated information as required by the Department.
- 5.4.12. Failure to comply with Federal, State and Local licensing requirements permitting, and certifications.

5.5. PROGRESSIVE PERMIT SUSPENSION AND REVOCATION

- 5.5.1 Receipt of the first permit suspension will result in suspension of pool establishment operations until the Department has verified that identified violations of this Regulation have been corrected.
- 5.5.2 Receipt of a second permit suspension will result in suspension of pool establishment operations for a period of a minimum of seven days.
- 5.5.3 Receipt of a third permit suspension within a year may result in the pool establishment permit being revoked. The owner of the said pool establishment may be restricted from operating the pool establishment for a minimum of thirty (30) days in the operational period for a seasonal pool and ninety (90) days for a year round pool, at which time the owner may be required to make a new application and submit a plan review, as if the pool establishment was a new establishment. Additional permit requirements may be imposed by the Department to address the violations that led to the revocation.

5.5.4 If violations are found, as identified in section 5.4 of this Regulation, the Department may revoke a permit without using the progressive permit suspension provisions set forth in sections 5.5.1, 5.5.2, and 5.5.3 of this Regulation.

6. INSPECTIONS AND INVESTIGATIONS

6.1. The Department, by the Director, has the authority to perform inspections, investigations, reviews, and other similar actions as necessary of any public or private pool; and may take samples and make analyses of pool water.

6.2. Authority for Department to Enter Premises.

6.2.1. **Regulated Commercial Premises.** Upon presenting proper identification, authorized representatives of the Department may enter upon the premises of properties regulated by the Department to perform routine inspections to ensure compliance with rules, standards, regulations, and ordinances adopted by the Department, the Departments of Health & Environmental Quality, county or municipal governing bodies, or the division of Occupational and Professional Licensing.

6.2.2. **Private Dwellings.** Inspections of private dwellings are made by consent of owner or otherwise responsible party or upon a warrant issued by a court.

6.2.3. **Consent by License or Permit:** The Department may require licensees or permittees to consent to access for inspections as part of their license or permit. Failure to allow access for inspections as set out in the license or permit may result in the suspension or revocation of the license or permit.

6.3. The owner or other responsible person may request information gathered by the Department during an investigation, inspection, or review as authorized by the Government Records Access and Management Act.

7. ENFORCEMENT MECHANISMS

If the Department has investigated or inspected any property or facility and believes the property owner or other responsible party is in violation of this Regulation or the Department has other reasonable grounds to believe that there has been a violation of any part of this Regulation or that the property owner or otherwise responsible party is not in compliance with this Regulation, the Department may take civil enforcement action as authorized by statute, rule, ordinance, and regulation and may also refer the matter for criminal prosecution. Civil enforcement may involve court or administrative actions, injunctive actions, and closures and may involve cost recovery, penalties, and other remedies. Civil and criminal actions may be brought simultaneously. A person does not need to be first adjudged liable in a civil matter before facing criminal charges.

7.1. **Criminal Enforcement Actions.** The Department may recommend criminal prosecution for environmental violations either alone or in conjunction with civil enforcement. Criminal prosecutions for environmental violations of state or federal law

may be filed by the District Attorney, Utah Attorney General, United States Department of Justice, or other enforcement entity. Factors that the Department may consider in recommending criminal enforcement include the following factors and any other relevant factors:

- 7.1.1. The nature and seriousness of the offense including the immediacy of the threat of danger to the life or safety of another or the harm or threatened harm to human health or environment;
- 7.1.2. The degree to which the violation was designed to provide economic gain or cost avoidance or it involved a pattern of conduct or a common attitude of illegal conduct;
- 7.1.3. The degree to which the offender is a known violator and has avoided prior actions by the department;
- 7.1.4. The degree to which prosecution might deter future violations;
- 7.1.5. The person's actual culpability in connection with the offense including the presence in connection with the offense including the presence of criminal intent;
- 7.1.6. The person's willingness to cooperate in the investigation including whether the violator has attempted to conceal evidence or prosecution of others;
- 7.1.7. The appropriateness of referring the case to other agencies having prosecutorial interest; and
- 7.1.8. Possibilities of civil remedies which would be more appropriate than initiating the criminal justice process.

7.2. Civil Enforcement Actions.

- 7.2.1. The Department may request that the District Attorney bring an action to restrain or enjoin actions in violation of public health, environmental laws, and other laws or abate conditions in violation of such laws.

7.3. Administrative Actions.

- 7.3.1. The Department may, at its discretion, issue a Notice of Violation & Order of Compliance ("NOV").
- 7.3.2. **Service of NOV.** The Department may provide notice to the owner of the property or otherwise responsible person by sending the NOV via first class mail to the last known address of the owner of the property or other responsible person. If notice is returned undeliverable, the owner of the property or other responsible person may be personally served or be given notice by other methods reasonably calculated to give actual notice to the owner or other responsible party.

7.3.3. **Contents of NOV.** The NOV must:

- (i) Describe the property and the persons believed to be in violation;
- (ii) Describe the violation;
- (iii) Describe remedial action that will comply with the provisions of this Regulation;
- (iv) Set a reasonable time for the performance of any required remedial action(s);
- (v) Describe the procedure to contest the NOV and the time limits for such a contest; and
- (vi) Notify the owner or other responsible person that if no written contest is filed within the time required, the NOV will become final and unappealable to any administrative entity or court.

7.4. **Additional Administrative Enforcement Authority.**

7.4.1. The Department may declare unsanitary conditions a threat and cause every threat affecting the public health to be abated.

7.4.2. **Variances.** Any variances allowed by the Department to the requirements of this Regulation must be only by written approval of the Board.

7.4.3. **Exercise of Physical Control.** The Department may establish, maintain, and exercise physical control over property and over individuals as the Department finds necessary for the protection of the public health, including but not limited to closing theaters, schools, and other public or private places and prohibit public gatherings. The physical control will be effective immediately. Any person to whom the physical control is directed must comply immediately; but upon proper written petition to the Director, must be granted a hearing within forty-eight hours. After the hearing, and depending upon the findings as to whether the person has complied with the provisions of this Regulation, the Director will continue the order in effect or modify or revoke it.

7.4.4. **Emergency Enforcement.** If the Director finds that an emergency exists, which requires immediate action to protect the public health or safety, he or she may, without notice or hearing, issue an order declaring the existence of an emergency and requiring that action be taken as he or she deems necessary to meet the emergency. The order will be effective immediately. Any person to whom the order is directed must comply and abate the threat immediately; but, upon proper written petition to the Director, the person must be granted a hearing within forty-eight hours. After the hearing and depending upon the findings as to whether the person has complied with the provisions of this Regulation, the Director will continue the order in effect or modify or revoke it. If circumstances warrant due

to the seriousness of the threat, the Department may act to correct or abate the emergency without issuance of an order or directive or without waiting for the expiration of compliance time previously given in an order.

8. CRIMINAL, CIVIL, AND ADMINISTRATIVE PENALTIES

8.1. Criminal Penalties.

- 8.1.1. Any person who is found guilty by a court of violating any of the provisions of this Regulation, either by failing to do the acts required herein or by doing a prohibited act, is guilty of a class B misdemeanor, pursuant to Utah Code Ann. § 26A-1-123 (2010).
- 8.1.2. Each day such violation is committed or permitted to continue constitutes a separate violation.
- 8.1.3. Each similar subsequent violation occurring within two years of the initial violation may constitute a class A misdemeanor.

8.2. Civil and Administrative Penalties.

- 8.2.1. Penalties may be included in a Settlement Agreement or Stipulation & Consent Order. Penalties may be assessed according to the following factors:
 - (i) The violator's history of compliance or non-compliance;
 - (ii) The violator's economic benefit of non-compliance;
 - (iii) The documented costs associated with environmental or health damage;
 - (iv) The violator's degree of willfulness or negligence; and
 - (v) The violator's good faith efforts to comply and cooperate.
- 8.2.2. The Department may multiply the penalty by the number of days the violation occurred.

8.3. Recovery of Investigative and Abatement Costs

- 8.3.1. The Department may recover its inspection, investigative, and abatement expenses and costs from owners or other responsible person(s).
- 8.3.2. The Department may record a judgment lien on a violator's property to recover its expenses and costs.

9. EFFECTIVE DATE

9.1. This Regulation becomes effective upon its adoption by the Board.

APPROVED AND ADOPTED this ____ day of _____, 2019.

SALT LAKE COUNTY BOARD OF HEALTH

By: _____
Dr. William Cosgrove, Chair

ATTEST:

GARY L. EDWARDS, M.S.
Executive Director
Salt Lake County Health Department