

2025

**FIRST
DISTRICT
HEALTH UNIT**

AQUATIC FACILITY RULES AND REGULATIONS

EFFECTIVE JANUARY 1, 2025



Public Health
Prevent. Promote. Protect.

Contents	Page
Rule and Regulation Twelve	3
Section 1: General Intent	4
Section 2: Definitions	5
Section 3: Licensing	13
Section 4: Inspection	17
Section 5: Construction and Utilities	19
Section 6: Management and Personnel	23
Section 7: Policies, Procedures and Record Keeping	27
Section 8: Water Quality, Treatment, Filtration, and Circulation	46
Section 9: Physical Facilities	51
Section 10: Special Venues	66
Section 11: Compliance and Enforcement	69
Appendix A: Langelier Saturation Index	73

NOTICE OF RULE AND REGULATION NO. 12 OF THE FIRST DISTRICT HEALTH UNIT, MINOT, NORTH DAKOTA

This rule and regulation regulates the inspection, operation, and monitoring requirements of the public and semi-public aquatic facilities within the boundaries of the First District Health Unit.

Section 1. This rule and regulation requires that all public and semi-public aquatic facilities be annually inspected by the District Health Officer, or his designate, and provides regulations and standards necessary to make these aquatic venues safe and healthful.

Section 2. During its months of operation, each public and semi-public aquatic facility shall submit a water sample from each aquatic venue, to a laboratory certified by the North Dakota State Department of Health, for a bacteriological analysis. A minimum of one sample per month must be submitted for each aquatic venue located at the facility. Samples must be submitted for each month that the aquatic venue is open for use by the public as per the requirements for water sampling found in the First District Health Unit Aquatic Facility Rules and Regulations.

Section 3. The District Health Officer, or his designate, may temporarily close any facility that has been determined to be a health or safety hazard or in the event of a failure to comply with any of the requirements found in the First District Health Unit Aquatic Facility Rules and Regulations, and may abate or cause suspension of the use of such a facility until such time as the aquatic facility is no longer deemed a health or safety hazard.

This rule and regulation made by the First District Board of Health is necessary and proper for the preservation of public health and safety.

This Rule and Regulation was adopted by the First District Board of Health on XXXXXXXX, 2024.

By Order of the First District Board of Health.
XXXXXXXXXX, President

Section 1 General Intent

- 1-1. Rule and Regulation No. 12 Section 1 of the First District Health Unit (FDHU) requires that all public and semi-public aquatic facilities be inspected at least annually by the District Health Officer, or his designate. If deemed necessary by the Environmental Health Division of the FDHU (hereafter referred to as the Department), an aquatic facility may be inspected more often.
- 1-2. Rule and Regulation No. 12 Section 2 of the FDHU requires that, during its months of operation, each public and semi-public aquatic facility shall submit a water sample taken from each aquatic venue to a laboratory certified by the North Dakota State Department of Health for bacteriological analysis.
- 1-3. Rule and Regulation No. 12 Section 3 of the FDHU states that the District Health Officer, or his designate, may temporarily close any aquatic facility that has been determined to be a health or safety hazard or in the event of a failure to comply with any of the requirements of this chapter. The Department may abate or cause suspension of the use of such aquatic facility until such time as the aquatic facility is no longer deemed a health or safety hazard.
- 1-4. This document shall serve as rules and regulations the scope of which shall include the construction, alteration, movement, replacement, repair, maintenance, and operation of all aquatic venues at all public and semi-public aquatic facilities located in the FDHU. All public and semi-public aquatic facilities located in the FDHU shall operate in a manner that follows all rules and regulations set forth in this code effective January 1, 2025.
- 1-5. The Department shall enforce these rules and regulations.
- 1-6. All temperatures will be given using the Fahrenheit scale.
- 1-7. The intent of this document is to:
 - A. Ensure that all new aquatic facilities and aquatic venues are constructed and operated in accordance with the most modern and up to date standards and procedures to provide a reasonable level of safety, health, property protection, and general welfare protection by regulating and controlling the design, construction, installation, quality of materials, location, and maintenance of aquatic facilities; and
 - B. Ensure that existing aquatic facilities are operated in accordance with the most up to date standards and procedures to ensure that they are as safe as possible and that the existing components of the facility are either able to assist in this goal or that existing components that prevent achieving this goal are modified or replaced to allow achievement of this goal.
- 1-8. If any section, subsection, part, sentence, clause, or phrase of this code is for any reason held to be invalid, such decision shall not affect the validity of any other remaining portion of this code.
- 1-9. Where there is a conflict between a general requirement and specific requirement, the specific requirement shall govern. Where, in any specific case, different sections of this code specify different materials, methods of construction, or other requirements, the most restrictive shall govern.

- 1-10. The provisions of this code are not intended to nullify any provisions of local, state, or federal law. If there is a conflict between any local, state, or federal law and any part of this code, the more restrictive shall govern.
- 1-11. References to chapter, section, part numbers, or to referenced requirements or provisions of code that are not specifically identified shall be construed to refer to the appropriate chapter, section, or part of this code.

Section 2 Definitions.

In this Code, unless the context or subject matter otherwise requires, the following definitions shall apply to terms used. Where terms are not defined, they shall be defined: first using their meanings as specified in the most recent version of the Model Aquatic Health Code (MAHC) or International Swimming Pool and Spa Code (ISPSC)(where applicable for pool construction purposes) or, second using their ordinarily accepted meanings within the context in which they are used. The most current version of the Merriam-Webster's Collegiate Dictionary shall be the source for the ordinarily accepted meaning.

- 2-1. **“Activity Pool”** means a water attraction designed primarily for play activity that uses constructed features and devices including pad walks, flotation devices and similar attractions.
- 2-2. **“Agency Having Regulatory Authority”** or **“Authority Having Jurisdiction”** or **“Regulatory Authority”** means an agency, organization, office or individual responsible for enforcing the requirements of a code or standard.
- 2-3. **“Approved”** means acceptable to the Department based on a determination of conformity with principals, practices, and generally recognized standards that protect public health.
- 2-4. **“Aquatic Facility”** means any place, business, or location that contains or at which any aquatic venue is located, and which is deemed to be an aquatic facility by the Department based on their criteria. The entirety of the property or properties identified by the legal description shall be considered to be part of the aquatic facility, and the aquatic facility shall be considered to include all support infrastructure. When applicable, aquatic facility also means any place, business, or location that contains or at which any float tank is located.
- 2-5. **“Aquatic Feature”** means an individual component within an aquatic facility; examples include slides, structures designed to be climbed or walked across, and structures that create falling or shooting water.
- 2-6. **“Aquatic Venue”** means an artificially constructed structure or modified natural structure where the general public or any subset of the general public is exposed to water intended for recreational or therapeutic purpose and where the primary intended use is not watering livestock, irrigation, water storage, fishing, or habitat for aquatic life. Such structures do not necessarily contain standing water or recirculated water, so water exposure may occur via contact, ingestion or aerosolization. Examples include swimming pools, wave pools, lazy rivers, surf pools, spas, therapy pools, waterslide landing pools, spray pads, and other interactive water venues. If applicable, requirements pertaining to aquatic venues shall also apply to float tanks.

- 2-7. **“Aquatic Venue Enclosure”** means an enclosure as defined herein that surrounds and secures an aquatic facility or aquatic venue.
- 2-8. **“Automated Controller”** or **“Controller”** means a system of at least one chemical probe, a controller and auxiliary or integrated component that senses the level of one or more water parameters and provides a signal to automatic feeders or other equipment to maintain the parameters within a user-established range.
- 2-9. **“Automatic Feeders”** means a chemical feeder that has valves controlled by electronic equipment to deliver needed chemicals.
- 2-10. **“Available Chlorine”** means the amount of chlorine in the reactive, oxidized form. Available chlorine is subdivided into free available chlorine (or free chlorine) and combined available chlorine (or combined chlorine).
- 2-11. **“Barrier”** means a permanent fence, wall, building wall or combination thereof that completely surrounds an aquatic venue and manages or limits access to the aquatic venue.
- 2-12. **“Bather”** means a person using an aquatic venue and deck area for the purpose of water sports, recreation, therapy, or related activities.
- 2-13. **“Bather Load”** means the number of bathers in the aquatic venue at a given moment or during a specific period of time.
- 2-14. **“Department”** means the Environmental Health Division of the First District Health Unit or its designated agent.
- 2-15. **“Cartridge Filter”** means a filter that uses a replaceable and disposable porous element as the filter medium.
- 2-16. **“Certified Pool & Spa Operator”** or **“CPO”** means an individual who has satisfied the class work requirements and demonstrated knowledge of course material by passing the examination administered by the Pool and Hot Tub Alliance.
- 2-17. **“Chemical Feeder”** means a device that dispenses chemicals into water at a predictable rate. The device may be controlled either automatically or manually.
- 2-18. **“Chlorine”** means the element having atomic number 17 on the periodic table that at room temperature and pressure is a heavy greenish yellow gas with a characteristic penetrating and irritating smell. When mixed with water, chlorine gas forms hypochlorous acid, hypochlorite ion, and hydrochloric acid. Chlorine is the general term used herein to refer to hypochlorous acid and hydrochlorite ion in aqueous solution derived from chlorine gas or a variety of chlorine-based disinfecting agents. Concentrations of all forms of chlorine in water herein are given in parts per million (ppm) or milligrams per liter (mg/L) which are equivalent units.
- 2-19. **“Chlorinator”** means a chemical feeder used to dispense any form of chlorine.
- 2-20. **“Circulation”** means the flow or movement of water through a given area or volume of an aquatic venue or circulation system.

- 2-21. **“Circulation System”** or **“Recirculation System”** means the mechanical system that recirculates water in an aquatic venue. This system includes, but is not limited to, pumps, hair and lint strainers, filters, valves, gauges, meters, heaters, surface skimmers, inlets, outlet fittings, piping, and chemical feeding devices.
- 2-22. **“Clarity”** means the degree of transparency of pool water.
- 2-23. **“Combined Chlorine”** or **“Combined Available Chlorine”** means the concentration of available chlorine present in the form of inorganic or organic chloramines.
- 2-24. **“Contaminant”** means a substance that soils, stains, corrupts, or infects another substance by contact or association.
- 2-25. **“Cove”** means the curved transition from wall to floor in a pool or spa.
- 2-26. **“Crack”** means all breaks in the structural shell of an aquatic venue vessel, basin, or deck.
- 2-27. **“Cross Connection”** means a connection or arrangement, physical or otherwise, between a potable water supply system and a plumbing fixture, tank, receptor, equipment, or device, through which it may be possible for non-potable, used, unclean, polluted, and contaminated water, or other substances to enter into any part of such potable water system under any condition.
- 2-28. **“Cyanurate-bound Available Chlorine”** means the concentration of available chlorine that is bound to cyanurate.
- 2-29. **“Deck”** means surface areas serving an aquatic venue, including the dry deck, perimeter deck, and pool deck.
- A. **“Dry Deck”** means all pedestrian surface areas within the aquatic venue enclosure not subject to frequent splashing or constant wet foot traffic. The dry deck is not perimeter deck or pool deck, which connects the pool to adjacent amenities, entrances, and exits. Landscape areas are not included in this definition.
- B. **“Perimeter Deck”** means the hardscape surface area immediately adjacent to and within 4 feet of the edge of the swimming pool also known as the wet deck area.
- C. **“Pool Deck”** means surface areas serving the entire aquatic venue, beyond the perimeter deck, which is expected to be regularly trafficked and made wet by bathers.
- D. **“Wet Deck”** means the sum of the perimeter deck and the pool deck.
- 2-30. **“Diatomaceous Earth Filter”** means a filter designed to use the fossilized skeletons from diatoms on a filter element.
- 2-31. **“Disinfection”** means a treatment that kills or irreversibly inactivates microorganisms that may cause disease.
- 2-32. **“Diving Pool”** means an aquatic venue used exclusively for diving.
- 2-33. **“Emergency Action Plan”** means a plan that identifies the objectives that need to be met for a specific type of emergency, who will respond, what each person’s role will be during the response and what equipment is required as part of the response.

- 2-34. **“Enclosure”** means an uninterrupted constructed feature or obstacle used to surround and secure an area that is intended to effectively prevent unpermitted, uncontrolled, and unfettered access. It is designed to resist climbing and to prevent passage through it and under it.
- 2-35. **“EPA Registered”** means all products regulated and registered under the Federal Insecticide, Fungicide and Rodenticide Act by the EPA.
- 2-36. **“Facility”** means the site of any business, firm, club, park, city, school, institution or residence.
- 2-37. **“Filter”** means a mechanical device for separating suspended particles from water. Refers to the complete mechanism or to any component parts.
- 2-38. **“Filter Media Rate”** means the rate of flow of water through a filter during a set period of time expressed in gallons per minute per square foot of effective filter area.
- 2-39. **“Floatation Tank”** means a tub that contains a saturated solution of magnesium sulfate having a specific gravity of 1.23 to 1.3, provides a light and sound reduced environment, and is maintained at a temperature of approximately 92-96 degrees F, or that contains a solution of another chemical compound and maintains specific conditions to produce a desired effect for bathers. Floatation tanks may also be called float tank, float room/pod/spa/chamber, isolation tank, or sensory deprivation tank.
- 2-40. **“Flume”** means a trough like or tubular structure, generally recognized as a water slide, that directs the path of travel and the rate of descent by the rider.
- 2-41. **“Free Chlorine”** or **“Free Available Chlorine”** means the portion of the total available chlorine that is not combined chlorine or cyanurate-bound chlorine and is primarily present as hypochlorous acid and hypochlorite. For purposes of this document, free chlorine is the portion of total chlorine that reacts with the DPD chlorine test.
- 2-42. **“Hand Wash Station”** means a location intended for the washing of hands and includes every location in an aquatic facility where hands are intended to be washed.
- 2-43. **“Hygiene Facilities”** means a structure or part of a structure that contains any toilet(s), shower(s), diaper-changing, handwashing station(s), or dressing capabilities serving bathers and patrons at an aquatic facility.
- 2-44. **“Hyperchlorination”** or **“Superchlorination”** means the intentional and specific raising of chlorine levels for a prolonged and defined period of time to inactivate pathogens in an aquatic venue.
- 2-45. **“Imminent Health Hazard”** means a substantial threat or danger to health that is considered to exist when there is evidence sufficient to show that a product, practice, circumstance, or event creates a situation that requires immediate correction or cessation of operation to prevent injury based on the number of potential injuries and the nature, severity, and duration of the anticipated injury or illness.
- 2-46. **“Indoor Aquatic Facility”** means a physical place that contains one or more aquatic venues and the surrounding bather and spectator/stadium seating areas within a structure that meets the definition of “Building” per the International Building Code. Indoor aquatic facility does not

include chemical storage, bather hygiene rooms or any other rooms with a direct opening to the aquatic facility. Otherwise known as a natatorium.

- 2-47. **“Inlet”** means wall or floor fittings where treated water is returned to the aquatic venue basin.
- 2-48. **“Interactive Water Play Aquatic Venue”** means any installation that includes sprayed, jetted, or other water sources contacting bathers and not incorporating standing or captured water as part of the bather activity area. These aquatic venues are also known as splash pads, spray pads, and wet decks.
- 2-49. **“International Swimming Pool and Spa Code”** or **“ISPSA”** means the document published by the International Code Council to establish minimum requirements for the design, construction, alteration, repair, and maintenance of swimming pools, spas, hot tubs, and aquatic facilities. At the time of adoption of this code, the most current version is the 2024 ISPSA published July of 2023.
- 2-50. **“Landing Pool”** means an aquatic venue or designated section of an aquatic venue located at the exit of one or more waterslide flumes. The body of water is intended and designed to receive a bather emerging from the flume for the purpose of terminating the slide action and providing a means of exit to a deck or walkway area.
- 2-51. **“Lazy River”** means a channeled flow of water in which the water is moved by pumps or other means of propulsion to provide a river-like flow that transports bathers over a defined path. A lazy river may include play features and devices. May also be referred to as a tubing pool, leisure river, leisure pool or current channel.
- 2-52. **“License”** or **“Permit”** means a document issued by the Department (or any agency having regulatory authority) to any person granting the right to do a particular thing. For purposes of this document, unless stated otherwise or unless context or Department interpretation indicates otherwise, license or permit shall mean the document issued by the department allowing a person to operate an aquatic facility in the boundaries of the First District Health Unit.
- 2-53. **“Lifeguard”** means an individual who has completed a Department recognized lifeguard training course offered by a Department recognized training agency and who holds a current certificate for such training. Lifeguard training is evaluated using the standards found in the MAHC. At the time of adoption of this code, the standards are found in Chapter 6.2.
- 2-54. **“Lifeguard Supervisor”** means an individual responsible for the oversight of lifeguard performance and emergency response at an aquatic facility, who has successfully completed a lifeguard supervisor training course that meets the requirements of this code, and who holds a valid certificate for such training. Lifeguard supervisor training is evaluated using the standards found in the MAHC. At the time of adoption of this code, the standards are found in Chapter 6.2.2.2.
- 2-55. **“MAHC”** or **“Model Aquatic Health Code”** means the document published by the Centers for Disease Control and Prevention that is recognized as the MAHC or Model Aquatic Health Code by the Department. Unless otherwise specified, MAHC shall always be construed to mean the most current version. At the time of adoption of this document, the most current version is the 4th Edition, published February 2023.

- 2-56. **“Microbiological Testing”** means testing of a water sample for the presence of microbiological organisms. Microbiological testing done to meet requirements contained herein shall only be done by labs that meet all criteria for certification by the regulatory authority and only using testing methodology recognized by the Department.
- 2-57. **“Night Swimming”** means using an aquatic venue during the time frame of one-half hour before sunset to one-half hour after sunrise.
- 2-58. **“Non-Recirculating Aquatic Venue”** means an aquatic venue that does not have any basin or containment for keeping water in a circulation system, but rather relies on a flow of treated water that is discharged to waste after passing through any aquatic features.
- 2-59. **“NTU”** means nephelometric turbidity unit. NTU’s are a unit used to designate the opacity of a liquid based on the readings of a nephelometer.
- 2-60. **“Operations Plan”** means a written document that has procedures, requirements and/or standards related to safety and operations which the aquatic facility staff shall follow. These plans shall include, but are not limited to:
- A. Training, emergency response and operations procedures;
 - B. Copies of SDS for all chemicals used at the facility;
 - C. Copies of all manuals for any equipment used at the facility including, but not limited to, automatic controllers, filters, pumps, chlorination equipment, and secondary treatment equipment.
- 2-61. **“Oxidation Reduction Potential”** or **“ORP”** means a measure of the tendency of a solution to either gain or lose electrons. Higher oxidation reduction potential indicates a more oxidative solution.
- 2-62. **“Patron”** means a bather or other person or occupant at an aquatic facility who may or may not have contact with aquatic venue water either through partial or total immersion or exposure to spray or droplets. Patrons are also persons that may or may not have direct contact with aquatic venue water but could still be exposed to potential contamination from the aquatic facility air, surfaces, or aerosols.
- 2-63. **“Person”** means any individual, partnership, corporation, company, municipality, agency, or any other entity that may own or operate or have any stake in an aquatic facility; or that may perform any action, task, or job at or pertaining to any aquatic facility.
- 2-64. **“pH”** means the negative log of the concentration of hydrogen ions. pH values range from 0 to 14 with numbers closer to zero being increasingly acidic and numbers closer to 14 becoming increasingly more basic. A pH of 7 is considered to be neutral.
- 2-65. **“Plumbing Fixture”** means a receptacle, fixture, or device that is connected to a water supply system or discharges to a drainage system or both and may be used for the distribution and use of water; for example toilets, urinals, showers, hand sinks, and hose bibbs.
- 2-66. **“Potable”** means water that is safe and suitable for drinking.
- 2-67. **“Public Aquatic Venue”** means any aquatic venue intended for public recreational use that is not a semi-public aquatic venue and regardless of whether a fee is charged for use. Any

aquatic venue at which a fee is charged for entry or use shall be considered a public aquatic venue regardless of where it is located.

- 2-68. **“Qualified Operator”** means an individual responsible for the operation and maintenance of the water and air quality systems and the associated infrastructure of the aquatic facility and who has successfully completed a Department approved operator training course to operate an aquatic facility offered by a Department recognized training agency and that holds a current certificate for such training.
- A. Any operator training course must have been approved by the Department prior to being considered to meet any requirements contained herein for qualified operators. Any course that has been approved by the Department shall be listed in Part C below.
 - B. The standards used to evaluate such courses are those found in the MAHC. At the time of adoption of this code, those standards are located in Section 6.1.
 - C. At the time of adoption of this code, the Certified Pool and Spa Operator course and CPO certification administered by the Pool and Hot Tub Alliance is considered to meet the requirements for an operator training course.
- 2-69. **“Residential Aquatic Venue”** means any aquatic venue located on private property, under the control of the homeowner, the use of which is limited to members of the homeowner’s family or their invited guests.
- 2-70. **“Responsible Supervisor”** means the individual on site at an aquatic facility that has direct oversight over all operations occurring on site including, but not limited to, water treatment operations and lifeguards during times the Qualified Operator is not present.
- 2-71. **“Residual”** means the concentration of a chemical in water.
- 2-72. **“Rope and Float Line”** means a continuous line not less than ¼ inch in diameter that is supported by buoys and attached to opposite sides of an aquatic venue to separate deep and shallow areas.
- 2-73. **“Safety Team”** means a group of any number of employees of the aquatic facility with job responsibilities related to the aquatic facility’s emergency action plan.
- 2-74. **“Sand Filter”** means a device that uses sand or sand and gravel as the filter medium.
- 2-75. **“Semi-public Aquatic Venue”** means any aquatic venue (other than a residential aquatic venue or a public aquatic venue) that is found in conjunction with hotels, motels, apartments, condominiums, health clubs, spas, etc.
- 2-76. **“Shower”** means a device that sprays water directly on the body.
- A. **“Cleansing Shower”** means a shower located in a hygiene facility using warm water and soap. The purpose of these showers is to remove contaminants before bathers enter the aquatic venue.
 - B. **“Rinse Shower”** means a shower typically located in the pool deck area. The main purpose is to remove dirt, sand, or organic products prior to entering the aquatic venue to reduce the introduction of contaminants.
- 2-77. **“Spa”** means a structure intended for either warm or cold water where prolonged exposure is not intended and that are not drained and refilled after each use. Spa includes any whirlpool,

hot tub, Jacuzzi, health pool or treatment pool. A spa is any aquatic venue designed for “soaking” as opposed to swimming. Spas may be equipped with features and devices such as seats or benches for sitting, jets, heated water, hydrotherapy, air induction bubbles, recirculation, etc.

- 2-78. **“Special Use Aquatic Venue”** means aquatic venues that do not meet the intended use and design features of any other aquatic venue or pool/spa listed/identified herein.
- 2-79. **“Structural Crack”** means a break or split in the basin or shell surface that weakens the structural integrity of the vessel.
- 2-80. **“Superchlorination”** see **“Hyperchlorination”**.
- 2-81. **“Surf Pool”** means any aquatic venue designed to generate waves dedicated to the activity of surfing on a surfboard or analogous surfing device commonly used in the ocean and intended for sport as opposed to general play intent for wave pools.
- 2-82. **“Swimming Pool”** or **“Pool”** means a subset of aquatic venues designed to have standing water for total or partial bather immersion. Pool does not include aquatic venues that are spas. Unless otherwise noted, the terms “swimming pool” or “pool” may be used interchangeably and will be used to refer to all swimming, diving, training, plunge, wading, activity, landing, skimmer, surf, therapy, or wave pools.
- 2-83. **“Take Out of Service”** means to stop the use of any aquatic venue by patrons and to exclude all patrons from the aquatic venue and all surrounding deck areas in such way so that no patron may contact any part of or water from the aquatic venue until such time as the aquatic venue is put back into service.
- 2-84. **“Therapy Pool”** means any aquatic venue used exclusively for aquatic therapy, physical therapy, 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.
- 2-85. **“Total Chlorine”** or **“Total Available Chlorine”** means the total of free available chlorine and combined available chlorine in water.
- 2-86. **“Treatment Chemicals”** means any substance or product added to the water of an aquatic venue to achieve a desired result or change in any parameter including, but not limited to water chemistry, disinfection, filtration, sanitation or maintaining water balance.
- 2-87. **“Turnover Rate”** means the period of time and rate of flow required to circulate a volume of water equivalent to the total of the aquatic venue capacity through the circulation system.
- 2-88. **“Wading Pool”** means any aquatic venue used exclusively for wading and intended for use by children where the depth does not exceed 24 inches.
- 2-89. **“Wave Pool”** means any aquatic venue designed to simulate breaking or cyclic waves for purposes of general play and not for purposes of surfing on a surfboard.

Section 3. Licensing.

- 3-1. All aquatic facilities located within the boundaries of the First District Health Unit (FDHU) are required to have applied for, been approved for, and issued a license by the Department with the license located on site and displayed as required herein prior to operating for business. An aquatic facility may not be open for business or allowed to operate without a current, valid license in good standing.
- 3-2. The license is the property of the Department and shall be returned to the Department upon request.
- 3-3. All aquatic facility license fees and any applicable late fees, reinspection fees or other fees are set according to the FDHU fee schedule.
- 3-4. All fees are not eligible to be pro-rated and are non-refundable.
- 3-5. Aquatic facility licenses are issued only to the named license holder for the named aquatic facility and are not transferable to any other license holder or any other named facility or facility location.
- 3-6. Aquatic facility licenses are valid for one calendar year (January 1 through December 31).
- 3-7. A license holder, or potential license holder, shall submit to the Department a plan review packet prior to:
 - A. The construction of a new aquatic facility;
 - B. The conversion of an existing structure for use as an aquatic facility; or
 - C. The remodeling of an existing aquatic facility that in any way modifies any part of an existing aquatic venue, that adds or deletes an aquatic venue, that modifies any restrooms or dressing rooms, that changes the intended use of an aquatic venue, that affects more than 33 percent of the deck, or any other change if the Department determines that plans and specifications are necessary to ensure compliance with this Code.
- 3-8. A plan review packet shall contain:
 - A. A plan review request form.
 1. This form shall be a form provided by the Department.
 2. This form shall be complete with all required information;
 - B. The plan review request fee; and
 - C. A complete set of plans and specifications for the facility.
- 3-9. The plans and specifications for a facility shall include, as required by the Department based on the type of operation, the following information to demonstrate conformance with Code provisions:
 - A. The address and legal description of the property. If necessary, a description of the site location with regard to highways, streets and landmarks shall be included;
 - B. A complete scaled plan of the entire area to be included in the project, including all specifications found in Section 5-2;
 - C. Proposed layout, mechanical schematics, construction materials, and finish schedules for all structures included as part of the aquatic facility;

- D. Plan and sectional views with all necessary dimensions for each aquatic venue and the surrounding area drawn to scale;
 - E. A piping diagram, drawn to scale, for each aquatic venue and for the entire facility that shows all appurtenances (to include at a minimum any source of chlorine, all filters, heaters, automated feeding and monitoring equipment, pumps, valves, and gauges). The diagram shall be of sufficient detail to permit a hydraulic analysis of the system and compliance with all code requirements;
 - F. The specifications shall contain manufacturer's information providing the specifications on all equipment (including, but not limited to, model numbers, catalog identification numbers, rates of flow, surface area, dynamic head and any other characteristics of all pumps, chlorinators, automated feeding and monitoring equipment, chemical feeders, filters, strainers, interceptors, and related equipment), manufacturer's brochures or sales materials, and photographs of each piece of equipment;
 - G. Proposed layout including all plumbing fixtures for all pool decks, restrooms, bath houses and changing rooms/locker rooms/dressing rooms drawn to scale. Diagrams or plans for any decking areas shall show designed drainage to prevent pooled water including any floor drains or gutters;
 - H. The name and address of the developer, architect, engineer, and/or design professional;
 - I. The location and specifications of the water supply, sewer, and refuse disposal facilities including any approved soil testing results and details for wells or onsite treatment systems, pumping stations and service riser pipes;
 - J. Documentation from the state, county, township, city, or other political subdivision having jurisdiction detailing that the zoning for the site is correct for an aquatic facility and that all required local permits have been obtained, including:
 1. Water Board approval,
 2. County/Township/City approval, and
 3. Any special use permits or zoning changes;
 - K. Documentation from the entity having authority over surface and subsurface waters detailing that the proposed new facility or proposed changes to an existing facility will not have a negative impact on water quality of any surface waters of the state and will not impact any drinking water sources for any community, non-community, or private water systems;
 - L. A storm water plan;
 - M. Copies of the licenses for any other type of operation licensed by the Department and located on premises;
 - N. Other information that may be required by the Department for the proper review of the proposed construction, conversion or modification, and procedures for operating an aquatic facility; and
 - O. A notarized certification from the design professional on their letterhead attesting that all parts of the design meet the design requirements and that all equipment meets the equipment requirements contained herein.
- 3-10. The Department shall process and issue either approval or denial of a plan review packet.
- A. Approval or denial shall be provided to the submitter in writing.
 - B. The submitter must have a copy of the written plan approval in their possession prior to any construction of a new aquatic facility or modification of an existing aquatic facility occurring.
 - C. A written denial shall include a description of the reasons for denial and all applicable code citations.

- 3-11. To apply for an aquatic facility license, a potential license holder shall submit a complete application packet to the Department. Upon notification that an application packet is incomplete, a potential license holder shall have 10 calendar days to submit all missing materials. If the missing materials are not received within this time frame, the application packet shall be rejected.
- 3-12. To qualify for an aquatic facility license, a potential license holder shall:
- A. Be an owner of the facility or an officer of the legal ownership;
 - B. Agree to operate in compliance with the requirements of this code;
 - C. Agree to allow the required access to the facility and to provide all required information in a truthful manner; and
 - D. Pay all applicable license fees and submit all required documentation at the time the application packet is submitted.
- 3-13. The aquatic facility license application packet shall include all the following:
- A. An aquatic facility license application.
 - 1. This application shall be a form provided by the Department.
 - 2. The application shall be complete with all required information;
 - B. The license fee;
 - C. The names of all Qualified Operators for the facility, including:
 - 1. A copy of the certification for each Qualified Operator.
 - 2. If a potential Qualified Operator had not received their certification at the time of application, the name of the course they will be attending along with the dates;
 - D. A copy of the Operations Plan for the facility;
 - E. A copy of the Training Plan for the facility;
 - F. A copy of the Safety Plan for the facility;
 - G. A copy of the Accidental Chemical Release Plan;
 - H. A copy of the Facility Evacuation Plan;
 - I. A copy of the Communication Plan;
 - J. A copy of the Inclement Weather Plan;
 - K. A copy of the Air Quality Operations Plan; and
 - L. A copy of the Plan Approval (for aquatic facilities required to have a plan review as per Section 3-7)
- 3-14. The aquatic facility license application shall include the following information:
- A. The operating name, mailing address, and physical address of the establishment;
 - B. The name, mailing address, telephone number and signature of the person applying for the license;
 - C. The name, title, address, and telephone number of the on-site or local person that is directly responsible for the establishment;
 - D. Information specifying whether the facility is owned by an association, corporation, individual, partnership, or other legal entity;
 - E. The mailing address, physical address, telephone number and name of the contact person for the entity detailed in Part D above;
 - F. A statement specifying whether the facility is designed and intended for year-round or seasonal operation;
 - G. Anticipated daily/weekly/monthly volume of bathers and all other patrons/customers as well as the calculated bather capacity; and
 - H. A statement signed by the applicant that:
 - 1. Attests to the accuracy of the information provided in the application, and

2. Affirms that the applicant will:
 - a. Comply with this code, and
 - b. Allow the Department access to the establishment and to records as specified herein.

- 3-15. The Department shall issue an aquatic facility license to the applicant only after:
 - A. An approved application packet is submitted.
 - B. The proposed license holder has provided proof of compliance with Section 5-5 in regards to design/construction; and
 - C. A preoperational inspection as specified herein has been completed and the aquatic facility is found to be in compliance with this code.

- 3-16. The Department may renew a license for an existing aquatic facility after:
 - A. All fees and charges owed to the Department are paid; and
 - B. An inspection or review of the most recent inspection shows that the facility is in compliance with this code.

- 3-17. Upon transfer of ownership of an aquatic facility:
 - A. The current license holder shall notify the Department in writing of the date upon which the transfer of ownership shall occur;
 - B. The proposed new license holder shall submit a complete application packet as detailed herein;
 - C. All fees and charges owed to the Department by the current license holder shall be paid in full;
 - D. Any part of the aquatic facility not in compliance with this regulation shall be brought into compliance; and
 - E. Any aquatic facility license issued by the Department for that facility that has been issued to any previous owner shall be rendered void on the date specified in Part A above.

- 3-18. If an application for a license is denied, the Department shall provide the applicant with a notice in writing that includes:
 - A. The specific reasons and code citations for the license denial;
 - B. The actions, if any, that the applicant must take to qualify for a license; and
 - C. Advisement of the applicant's right of appeal and the process and time frames for appeal that are provided in law.

- 3-19. Upon transfer of ownership of an aquatic facility, any unpaid fees or charges owed to the Department by any prior owner shall become the responsibility of the new owner.

- 3-20. The application for licensure shall be made at least 30 days before the intended date of opening or commencement of operations of any part of the aquatic facility.

- 3-21. If any information required to be submitted to the Department in an application packet changes, documentation of such changes shall be provided to the Department within 7 days of the date the information changes. Failure to do so shall result in suspension or revocation of the license.

- 3-22. If any other type of regulated activity occurs on the premises of an aquatic facility, those regulated activities shall be licensed as required. If any activity requiring a license is not

operated in accordance with all required regulations for that activity, the aquatic facility license may be suspended at the discretion of the Department until such time as all aspects of all regulated activities are deemed in compliance with all requirements.

- 3-23. By purchasing a license, the owner/operator agrees to operate in full compliance with this code and agrees to all terms and conditions contained herein. The license holder also agrees to take any necessary steps to bring a licensed facility into compliance.
- 3-24. The Department may revoke or suspend any license for cause. Before the license will be revoked or suspended, the Department shall notify the licensee in writing of the reason for the revocation or suspension.
- 3-25. The licensee may appeal the revocation or suspension. The appeal shall be requested in writing, shall be signed by the licensee, and shall be submitted to the Department within 10 days of the licensee being notified of the revocation. During the appeal, the revocation or suspension shall remain in effect.
- 3-26. Periods of non-operation.
- A. If a non-seasonal facility ceases operations for a period of 30 days or longer, then the license for that facility shall be considered suspended.
 - B. If a license is suspended because of a period of non-operation, operations may not resume until:
 - 1. A pre-operational inspection is performed;
 - 2. A passing microbiological test is obtained for each aquatic venue; and
 - 3. Permission is granted by the Department to resume operation.
 - C. If a non-seasonal facility ceases operations for a period of 60 days or longer, then the license for that facility shall be considered revoked.
 - D. If a license is revoked under Part C, then any potential license holder shall obtain a new license as detailed in this section prior to beginning operations.
- 3-27. The aquatic facility license shall be located on premises in a conspicuous location at the entrance to the aquatic facility and shall be displayed so as to be easily visible to all patrons.

Section 4: Inspection

- 4-1. After the Department presents official credentials and provides notice of the reason for, and an intent to conduct, an inspection, the license holder or their designate shall allow the Department to determine if the aquatic facility is in compliance with this code by allowing access to the aquatic facility, allowing inspection, and providing information and records specified in this code and to which the Department is entitled according to law, during the aquatic facility's hours of operation, when employees are present, when aquatic facility maintenance or other operations are occurring, and at other reasonable times.
- A. Inspection may include:
 - 1. Inspecting, investigating, or evaluating any part of an aquatic facility or the actions of any staff present for compliance with this code,
 - 2. Verifying compliance with previously written violation orders,
 - 3. Collecting samples or specimens,
 - 4. Examining, reviewing, and copying relevant documents and records,
 - 5. Obtaining photographic or other evidence needed to enforce this code, or
 - 6. Questioning any person.

- B. The Department may suspend the aquatic facility license upon failure to allow or cooperate with, upon interfering with, upon attempting to delay, or upon providing false or misleading information during any inspection.
- 4-2. If a person denies access to the Department, the Department shall:
- A. Inform the person that:
 - 1. The license holder is required to allow access to the Department as specified in this code,
 - 2. Access is a condition of the acceptance and retention of an aquatic facility license to operate as specified under Section 7-1; and
 - B. Make a final request for access; and
 - C. If the person continues to deny access, the Department shall notify the person in charge that the license for the aquatic facility is immediately suspended.
- 4-3. If, after the Department: (1) presents credentials and provides notice as specified under Section 4-1, (2) explains the authority upon which access is requested, and (3) makes a final request for access as specified in Section 4-2, the license holder or their designate continues to refuse access, the Department shall provide details of the denial of access on an inspection form.
- 4-4. The Department shall document on an inspection report form:
- A. Administrative information about the aquatic facility's identity, address, inspection date and type of inspection.
 - B. Specific factual observations or violative conditions or other deviations from this code that require correction by the license holder.
 - C. Any required correct by dates or time frames for correction of items determined to be out of compliance with the requirements of this code.
 - D. Inspection report forms and all the information contained therein are public record and shall be available for the public to view.
- 4-5. The inspection form shall be signed by the Department and by the license holder or their designate. At the conclusion of the inspection and according to law, the Department shall provide a copy of the inspection report form to the license holder or their designate.
- 4-6. If the license holder or their designate declines to sign the inspection form, the Department shall:
- A. Inform a person who declines to sign the inspection form that:
 - 1. Refusal to sign the inspection form does not affect the license holder's obligation to correct the violations noted in the inspection report within the time frames specified, and
 - 2. A refusal to sign an inspection form is noted in the inspection form and is recorded in the Department's historical record for that facility.
 - B. Make a final request that the license holder or their designate sign the inspection form.
- 4-7. The Department shall inspect each aquatic facility at a frequency as determined by the Department to be necessary to verify compliance with the regulations contained herein. No aquatic facility shall be inspected less than one time per calendar year.

- 4-8. For those aquatic facilities that are seasonal in nature, it is the responsibility of the license holder to ensure that their aquatic facility is inspected as required. Aquatic facilities that are not inspected as required may have their license suspended or revoked.
- 4-9. Except for seasonal aquatic facilities that have not modified any part of the aquatic facility since the date of their last inspection (including, but not limited to, modifying any policies or procedures contained herein, any change in chemicals used to achieve required water levels mandated herein, and change of Qualified Operator(s)), any seasonal aquatic facility shall contact the Department and schedule an inspection, and shall have been inspected and given approval prior to allowing any patrons within the premises of the aquatic facility.
- 4-10. The Department shall conduct one or more preoperational inspections to verify that the aquatic facility is constructed and equipped in accordance with the approved plans and approved modifications of those plans, has an operations plan, is staffed with the required qualified operators and is in compliance with law and this code.
- 4-11. Any aquatic facility that fails to meet a certain minimum standard as defined by the Department shall have a mandatory reinspection. Reinspections shall be performed by the Department and a reinspection fee shall be charged to the license holder as per the FDHU fee schedule.
- 4-12. Time frame for Correction.
 - A. Except as specified in Part B, the license holder shall correct items by a date or time agreed to or specified by the Department but no later than 90 calendar days after the inspection.
 - B. The Department may approve a compliance schedule that extends beyond the time limits specified under Part A of this section if a written schedule of compliance is submitted by the license holder and no health hazard exists or will result from allowing an extended schedule for compliance.
- 4-13. After a time frame as specified under Section 4-12, or after receiving notification that the license holder has corrected a violation, the Department shall verify correction of the violation, document the information on an inspection report, and enter the report in the Department's records.

Section 5: Construction and Utilities. This section shall pertain to the construction of new facilities, the renovation or updating of any existing facilities, and to the maintenance of existing facilities. All operations and maintenance of existing facilities shall be done so as to bring and keep all parts of the aquatic facility in such a state so as to meet the requirements for a newly constructed aquatic facility.

- 5-1. All aquatic facilities shall be designed and constructed in compliance with the guidance and specifications for construction of aquatic venues and aquatic facilities found in the most current versions of:
 - A. The Model Aquatic Health Code (MAHC). At the time of adoption of this code, this is the 2023 MAHC (4th Edition, February 2023), Chapter 4.0 Aquatic Facility Design Standards and Construction as well as any other specifications found in other Chapters pertaining to design and construction of any part of an aquatic facility.
 - B. The International Swimming Pool and Spa Code (ISPSC). At the time of adoption of this code, this is the 2024 version.

- 5-2. If any specification detailed in this code differs from specifications detailed in the MAHC or ISPSC, then the stricter standard shall be enforced.
- 5-3. If any specifications detailed in the MAHC differ from those in the ISPSC, then the stricter standard shall be enforced.
- 5-4. If any specification found in the MAHC or ISPSC is different than any requirement found in the adopted regulations of a local jurisdiction or the State of North Dakota pertaining to buildings, mechanical equipment, electrical installation or equipment or plumbing installation or equipment, then the more stringent standard shall be followed.
- 5-5. Aquatic facility plans.
- A. Aquatic facility plans shall be prepared by an approved design professional. The design professional shall provide certification to the Department that all parts of the design meet the requirements contained herein. Certification shall:
1. Be on the letterhead of the design professional;
 2. State that all parts of the design conform with the requirements for an aquatic facility contained in the FDHU Aquatic Facility Rules and Regulations;
 3. Be signed by the person responsible for the final design of the aquatic facility; and
 4. Be notarized.
- B. Upon completion of construction, certification shall be provided to the Department from the design professional or company that did the construction work detailing that all parts of the aquatic facility were constructed and installed in compliance with the requirements herein and exactly as provided for in the aquatic facility plans. Certification shall:
1. Be on the letterhead of the design professional or company that did the construction work;
 2. State that the finished aquatic facility was built in compliance with the approved plans and that the finished aquatic facility is in compliance with all requirements for an aquatic facility contained in the FDHU Aquatic Facility Rules and Regulations and all other applicable codes and laws;
 3. Be signed by the person responsible for the final design of the aquatic facility or the person responsible for overseeing the construction of the aquatic facility; and
 4. Be notarized.
- C. Any aquatic facility which is found to not meet the design and construction requirements contained herein after completion of Parts A and B above shall have the aquatic facility license revoked and shall not be eligible for licensure until any deficiencies are corrected and approval is given by the Department.
- 5-6. Aquatic facilities that are currently licensed and in operation on the date of implementation of this code and that are in compliance with the previous version of this code may be approved to continue operations by the Department. Such facilities shall have two years from the date of implementation of this code to come into compliance with any design and construction standards mandated in this Section and by the Department.
- 5-7. Aquatic facilities that do not have a current license on the date of implementation of this code shall come into compliance with this code prior to being licensed or resuming operations.

5-8. Location

- A. The proposed site of the aquatic facility shall have approved water supply, wastewater, and solid waste/trash disposal facilities available.
- B. Aquatic facilities shall not be located in proximity to any source of potential contamination or likely contamination or in such a location that environmental contaminants shall affect any part of the aquatic facility.
- C. Grass, earth, and sand areas shall be a minimum of eight feet from the edge of the wet deck of any aquatic venue.
- D. Any grass, earth or sand areas at an aquatic facility shall be designed and constructed to prevent the tracking of dirt, sand, or any organic materials from those areas onto any deck or into any aquatic venue.
- E. Vegetation shall not overhang the wet deck or any part of an aquatic venue.

5-9. Water.

- A. Source and fill water. All water used at an aquatic facility shall meet the following requirements:
 - 1. Be treated, potable water; and
 - 2. Come from a source that:
 - a. Is a public water system regulated by NDDEQ; or
 - b. Meets the requirements for a public water system as set by NDDEQ; or
 - c. Does not fall under Parts a or b above, but that is approved by the Department.
- B. Potable water for drinking shall be provided to and always available to all patrons.

5-10. Wastewater.

- A. The wastewater system shall either be a municipal wastewater system or a non-municipal wastewater system that meets the requirements of the Department.
- B. Sewage shall be conveyed to the point of disposal through an approved sanitary sewage system or other system, including the use of sewage transport vehicles, waste retention tanks, pumps, pipes, hoses, and connections that are constructed, maintained, and operated according to law.
- C. Non-water-carried sewage disposal facilities are prohibited, except as permitted by the Department in remote areas or because of special situations.
- D. If a facility uses an onsite treatment system for sewage disposal and treatment, then that system shall have been designed by the Department or shall receive approval by the Department prior to being used.
- E. Sewage and other liquid wastes shall be removed from a facility by a sewage transport vehicle in such a way that a public health hazard or nuisance is not created.
- F. Facilities shall be kept free from the effluvia arising from any sewerage, drain, privy, or other source within the control of the proprietor.
- G. Wastewater and filter backwash water shall be discharged to the sewer and may not be returned to any aquatic venue.
- H. Conditions shall not create any standing water, a nuisance, offensive odors, stagnant wet areas, or an environment for the breeding of insects.

5-11. Electrical, Structural, Mechanical and Plumbing.

- A. All parts of the aquatic facility shall be designed, installed, and maintained in compliance with any requirements found in the adopted regulations of the local

jurisdiction or State of North Dakota pertaining to buildings, mechanical equipment, electrical installations and plumbing installations.

- B. In the absence of a standard in this code, or of the local jurisdiction, or of the State of North Dakota pertaining to any aspect of an aquatic facility, then the Department shall determine the appropriate standard to apply and the aquatic facility shall meet and maintain all parts in compliance with that standard.
- C. Any aquatic venue related mechanical, electrical, or plumbing system component lawfully in existence at the time of implementation of this code shall be permitted to have their use and maintenance continued so long as the use, maintenance, or repair is in accordance with the original design and no hazard to life, health, or property is created.

5-12. Replacement.

- A. Any changes to any part of the physical facility shall be done in compliance with the most current version of this code and only after having received approval from the Department.
- B. Any replacement of any fixtures, equipment, or any part of the recirculation system shall be with equipment that meets the requirements found in the most current version of this code and only after having received approval from the Department.
- C. If any part of an aquatic facility, through malfunction or through design standards or specifications causes a physical or biological hazard or prevents the aquatic facility from maintaining compliance with the standards contained herein, the Department may require that the license holder update, fix or modify that part of the aquatic facility regardless of whether the part met the requirements of the code that were in effect at the time of construction or installation.

5-13. Circulation Systems.

- A. Each aquatic venue shall have a circulation system that serves only that single aquatic venue.
- B. For purposes of determining whether any aquatic venue is a single aquatic venue:
 - 1. An aquatic venue shall only have a single basin or pool.
 - 2. An aquatic venue shall have only a single reservoir or collection tank. This reservoir or collection tank may only serve features in one contiguous location.
- C. No parts of any circulation system may serve any function in any other circulation system and no water from any aquatic venue shall be allowed to mix with or discharge into any part of any other aquatic venue.

5-14. Interactive Play Water Venues. The collection tank shall have a minimum operational volume of 4000 gallons of water.

5-15. Hygiene Facilities.

- A. All aquatic facilities shall include separate men's and women's hygiene facilities.
- B. The number of plumbing fixtures shall be determined using the total calculated bather load of all aquatic venues in the aquatic facility or any applicable local, state, or federal code, whichever is greater.
- C. Cleansing showers shall be provided in number based on the total calculated bather load of all aquatic venues in the aquatic facility or on any applicable local, state, or federal code, whichever is greater.
 - 1. For calculating shower numbers, the bather load shall be split equally between male and female bathers.

- 2. One shower shall be provided per 20 bathers or as required in plumbing code, whichever number is more stringent.
 - 3. Shower rooms shall be located adjacent to the changing area and shall not be used as hallways between the changing area and any aquatic venue.
 - D. The hygiene facilities at any aquatic facilities shall provide changing areas including lockers or other equipment for storage of personal items. Aquatic venues located in lodging establishments or residential settings may be excluded from this requirement at the discretion of the Department.
 - E. The changing area of the hygiene facility shall have a floor area of at least 3.5 square feet per bather (based on the total calculated bather load of all aquatic venues at the aquatic facility).
 - F. Hygiene facilities shall be located to provide entrance to any aquatic venue at the most shallow point of the aquatic venue.
 - G. Hygiene facilities shall be provided with heating and cooling facilities that are capable of maintaining a constant temperature of 70-75 degrees.
 - H. Diaper-changing stations are required in all hygiene facilities in all aquatic facilities and shall be located to have direct access to a hand washing station.
- 5-16. All aquatic facilities in the First District Health Unit shall be constructed in compliance with and operated in compliance with the legally adopted fire code for the jurisdiction in which they are located or for the state of North Dakota, whichever standard is stricter.

Section 6: Management and Personnel

Management and supervisory requirements.

- 6-1. Every aquatic facility shall have on staff a qualified operator to directly oversee all operations of all aquatic facilities including, but not limited to:
- A. Daily operations;
 - B. Training of each responsible supervisor;
 - C. Maintenance of all aquatic venues and related equipment; and
 - D. All other duties assigned to the qualified operator contained herein.
- 6-2. The qualified operator shall either be present onsite at the aquatic facility or be immediately available within 2 hours during all times of operation of any aquatic venues or when maintenance or aquatic facility operations are occurring.
- 6-3. All aquatic facilities are required to submit documentation to the Department proving that any person acting as or designated to be a qualified operator has passed an approved qualified operator training course prior to the qualified operator serving in that capacity at the aquatic facility.
- A. The certification for any qualified operator must be current.
 - B. The certification for any qualified operator must be in good standing with the issuing agency.
 - C. The Department shall maintain such documentation in their records.
 - D. The aquatic facility shall have a copy of such documentation on hand and available for immediate review at the aquatic facility.
 - E. The qualified operator shall obtain any continuing education mandated as part of their qualified operator certification or by the Department. Records of such continuing

education being obtained shall be maintained on hand and copies provided to the Department.

- F. If an individual fails to comply with Part E, then that individual's qualified operator certification will no longer be accepted by the Department and that individual may no longer serve as a qualified operator at any facility under the jurisdiction of the Department.

- 6-4. The license for any aquatic facility shall immediately be suspended for any violation of Sections 6-1, 6-2 or 6-3.
 - A. No patrons shall be allowed to be in or to use any part of any aquatic venue while the license is suspended.
 - B. The facility may not resume operations of any aquatic venue until given approval to do so by the Department.
- 6-5. During such times as the qualified operator is not on premises as allowed under Section 6-2, there shall be present a responsible supervisor. The responsible supervisor shall be knowledgeable to the satisfaction of the Department regarding aquatic venue regulations and operations and shall:
 - A. Be capable of testing, recording and interpreting water quality parameters required herein,
 - B. Know how to make adjustments, as needed, to maintain required water quality parameters as required herein,
 - C. Know general maintenance procedures as required by daily operational verifications or adjustments required herein,
 - D. Know the criteria that mandate closure of an aquatic venue or of the aquatic facility, and
 - E. Know how and when to contact the qualified operator.
- 6-6. The qualified operator or responsible supervisor (as allowed under Section 6-5) shall be responsible for ensuring that all parts of the aquatic facility are maintained and operated in compliance with the regulations contained herein.
- 6-7. The qualified operator shall train all staff that perform water parameter testing or that collect water samples for microbiological analysis on the correct procedures for sample collection and operation of any testing equipment used.
 - A. Such training shall occur prior to new employees performing any testing or collecting any samples.
 - B. Such training shall occur at least annually for all staff.
 - C. When any new testing equipment is to be placed into service, staff shall be trained in correct use prior to the equipment being placed into service.
- 6-8. All aquatic facilities shall have a designated safety team. The responsibilities of the safety team shall include but not be limited to:
 - A. Enforce the aquatic facility rules and regulations by interfacing with patrons,
 - B. Responding to reported emergencies,
 - C. Identify health and safety hazards and take action to mitigate or avoid the hazard,
 - D. Know where PPE is located and use it when required,
 - E. Ensuring that safety and preventive maintenance inspections are done during seasons and periods that the aquatic facility is open and that the results are recorded in a log or form maintained at the aquatic facility, and
 - F. Interface with the Department related to requirements of this code.

Lifeguard requirements.

- 6-9. Aquatic venues with standing water and meeting any of the following criteria are required to have lifeguards present:
- A. Be a public aquatic venue;
 - B. Be a semi-public aquatic venue with a surface area greater than 2000 square feet;
 - C. Be a semi-public aquatic facility with multiple aquatic venues with a combined surface area that is greater than 2000 square feet;
 - D. Be any aquatic venue constructed after the date of adoption of this code with any point that is greater than 5 feet deep;
 - E. Any aquatic venue that allows unsupervised children under the age of 14 years;
 - F. Any aquatic venue while it is being used for the recreation of youth groups, including but not limited to childcare usage or school groups;
 - G. Any aquatic venue, while it is being used for group training must have dedicated lifeguards on deck for class surveillance, including but not limited to competitive swimming and/or sports, lifeguard training, exercise programs, and swimming lessons;
 - H. Any aquatic venue with an induced current or wave action including but not limited to wave pools and lazy rivers;
 - I. Waterslide landing pools;
 - J. Any aquatic venue in which patrons enter the water from any height above the deck including but not limited to diving boards, drop slides, starting platforms, and/or climbing walls. This includes pool slides that discharge into water depths deeper than 5 feet; and
 - K. Any aquatic facility that sells or serves alcohol or that allows the consumption of alcohol within the aquatic venue enclosure during all periods when alcohol is sold, served, or allowed to be consumed.
- 6-10. Where lifeguards are used, the aquatic facility shall provide, prior to patrons using or being exposed to the water of any aquatic venue, the minimum number of lifeguards and staff required per the provisions of the safety plan such that:
- A. All zones of patron surveillance are staffed during operation,
 - B. Zones of patron surveillance for individual aquatic venues not in service must also be staffed unless an effective means is provided to restrict and monitor access to the aquatic venue,
 - C. Rotations can be conducted while all zones are staffed,
 - D. The lifeguard manager or lifeguard in charge is present,
 - E. Additional person(s) to rapidly respond to an emergency to help the initial rescuer are present, and
 - F. At least one lifeguard is always present and on duty.
 - G. No remote safety monitoring systems or any kind of remote viewing system be allowed to take the place of any required lifeguard.
- 6-11. Lifeguard responsibilities shall include (but are not limited to):
- A. Monitoring patrons within the zone of patron surveillance responsibility,
 - B. Enforcing facility rules,
 - C. Responding to emergencies including water rescue, CPR, AED use, and first aid,
 - D. Identifying health and safety hazards and taking action to mitigate or avoid the hazard,
 - E. Maintaining skills at a test-ready level of proficiency,
 - F. Wearing the identifying uniform,
 - G. Wearing corrective eyewear (if needed) to correct poor vision to properly perform patron surveillance and wear polarized sunglasses,

- H. Wearing SPF15 or greater protection if exposed to UV, and
- I. Knowing where PPE is located and using it when required.

6-12. Lifeguard Qualifications.

- A. All persons assigned lifeguard responsibilities must have met the criteria found in MAHC Section 6.2.
- B. Lifeguards certified for shallow water depths shall not be assigned to a zone of patron surveillance with water depths greater than the depth for which they are certified.

6-13. Lifeguards assigned to patron surveillance shall not be assigned any other tasks that are not directly involved with patron surveillance responsibilities.

6-14. While conducting patron surveillance, lifeguards may not:

- A. Engage in social conversations, or
- B. Have on their person or at their lifeguard station any reading material, phones, texting devices, music players, or any other non-emergency related electronic devices. Any emergency related electronic devices may not be used for any non-emergency purposes.

6-15. All lifeguards shall be under the direct supervision of a lifeguard manager.

- A. The lifeguard manager shall be a qualified lifeguard, and
- B. Shall make all decisions regarding the number of and disposition of all lifeguards on duty during all hours the facility is open to use by patrons.

6-16. Aquatic facilities that are required to have two or more lifeguards to satisfy zone responsibilities as per the safety plan shall have an additional person at the aquatic facility during all hours of operation designated as the lifeguard supervisor. This person may be one of the other lifeguards at the facility.

- A. Lifeguard supervisor duties shall not interfere with the primary duty of patron surveillance.
- B. Lifeguard supervisor duties shall include, but not be limited to:
 - 1. Monitor the performance of lifeguards in their zone of bather surveillance responsibility,
 - 2. Make sure the rotation is conducted in accordance with the safety plan,
 - 3. Coordinate staff response and patron care during an emergency,
 - 4. Identify health and safety hazards and communicate to staff and management to mitigate or otherwise avoid the hazard, and
 - 5. Make sure safety related equipment required in Section 9 is in place and in good condition.

Employee health.

6-17. Employees with open wounds may enter the water or serve in a lifeguard role only if they have approval from a health care provider or wear a waterproof, occlusive bandage to cover the wound.

6-18. Lifeguards or other employees ill with diarrhea or vomiting shall be prohibited from entering or coming into contact with the water from any aquatic venue or serving as a lifeguard. The prohibition shall last until at least 24 hours after symptoms stop.

Other training and certifications.

- 6-19. Any person who handles or operates chlorine gas cylinders or gas chlorinating equipment shall be trained in their use and shall obtain and maintain any and all required certifications pertaining to gas chlorine or gas chlorinating equipment.
- 6-20. Records of all training shall be maintained for all employees for the time as required in law or for 5 years, whichever is longer. These records shall include, at a minimum:
- A. Name of employee;
 - B. Date of training;
 - C. Outcome/result; and
 - D. Name of organization providing training and name of instructor.

Section 7: Policies, Procedures, and Record Keeping

Duties and responsibilities of the license holder.

- 7-1. The aquatic facility license holder is responsible for performing certain actions specified herein. The eligibility of any license holder to have an aquatic facility license is contingent upon the license holder performing those actions. Upon acceptance of the license issuance by the Department, the license holder agrees that in order to retain the license they shall:
- A. Post the license in a location in the facility that is conspicuous to customers;
 - B. Comply with all provisions of this code including, but not limited to, the conditions of a granted variance and approved plans;
 - C. Immediately discontinue operations and notify the Department if an imminent health hazard may exist as specified under Section 7-2;
 - D. Allow representatives of the Department access to the facility as specified herein;
 - E. Replace existing facilities and equipment with facilities and equipment that comply with this code if:
 - 1. The Department directs the replacement because the facilities and equipment constitute a public health hazard or nuisance or no longer comply with the criteria, upon which the facilities and equipment were accepted,
 - 2. The Department directs the replacement of the facilities and equipment because of a change of ownership, or
 - 3. The facilities and equipment are replaced in the normal course of operation;
 - F. Comply with the directives of the Department including time frames for corrective actions specified in inspection reports, notices, orders, warnings, and other directives issued by the Department in regard to the license holder's facility or in response to community emergencies;
 - G. Accept notices issued and served by the Department according to law;
 - H. Be subject to the administrative, civil, injunctive, and criminal remedies authorized in law for failure to comply with this code or a directive of the Department, including time frames for corrective actions specified in inspection reports, notices, orders, warnings, and other directives;
 - I. Notify customers that a copy of the most recent facility inspection report is available upon request by posting a sign or placard in a location in the facility that is conspicuous to customers or another method acceptable to the Department;

- J. Ensure that the aquatic facility is operating in accordance with any mandated policies and procedures including, but not limited to the operating plan, training plan and safety plan;
- K. Ensure that the aquatic facility has a safety team. In absence of any other facility staff being designated as being a member of the safety team, the license holder shall become the safety team and immediately carry out all duties as mandated herein;
- L. Place and maintain all placards as mandated herein. Failure to post mandated placards; or the concealment, mutilation, alteration, or removal of any placard without the permission of the Department shall result in permanent license revocation; and
- M. Carry out any other duties specifically assigned to the license holder specified herein.

Mandated closure and closure criteria.

- 7-2. In the event of any emergency occurrence or other conditions that could cause an imminent health hazard, the license holder or their designate shall cease operations and report such occurrence or condition to the Department.
- A. Except as specified in this section, a license holder shall immediately discontinue operations and notify the Department if an imminent health hazard may exist because of an emergency such as a fire, flood, extended interruption of electrical or water service, sewage backup or sewer failure, misuse of poisonous or toxic materials, onset of an apparent recreational water illness outbreak, gross insanitary occurrence or condition, any condition detailed in Part E below, or other circumstance that may endanger public health.
 - B. A license holder may continue operations in an area of a facility that is unaffected by the imminent health hazard if approval is granted by the Department.
 - C. Considering the nature of the potential hazard involved and the complexity of the corrective action needed, the Department may agree to continuing operations in the event of an extended interruption of electrical or water service if:
 - 1. A written emergency operating plan has been approved;
 - 2. Immediate corrective action is taken to eliminate, prevent, or control any safety risks and imminent health hazards associated with the electrical or water service interruption; and
 - 3. The Department is informed upon implementation of the written emergency operating plan.
 - D. If operations are discontinued under this section or otherwise according to law, the license holder shall request and have obtained permission from the Department before resuming operations and may not resume operations until such permission is obtained.
- 7-3. Ceasing operations- Department ordered. The Department may order immediate correction or aquatic venue closure for any of the following imminent health hazard violations:
- A. Failure to provide all required supervision and staffing as required herein;
 - B. Failure to maintain the minimum required disinfectant residual concentrations as specified herein;
 - C. Failure to operate the circulation system continuously;
 - D. Measured pH values below 6.5 or above 8.0;
 - E. Use of water from a non-approved supply or source for any purpose;
 - F. Unprotected overhead electrical wires within 20 feet horizontally of the aquatic venue;
 - G. Non-GFCI protected receptacles within 20 feet of the inside wall of aquatic venue;

- H. Failure to maintain an emergency lighting source;
- I. Absence of all required lifesaving equipment on deck;
- J. Aquatic venue bottom not visible;
- K. Absence or improper depth markings at an aquatic venue;
- L. Plumbing cross connections between the potable water supply and aquatic venue water or between sewage system and the aquatic venue including filter backwash facilities;
- M. Failure to provide and maintain an enclosure to prevent unauthorized access to the aquatic facility or aquatic venue when required;
- N. Use of unapproved chemicals or the application of chemicals by unapproved methods to aquatic venue water;
- O. Broken, unsecured, or missing main drain grate or any submerged suction outlet grate in the aquatic venue;
- P. The number of patrons exceeding the theoretical peak occupancy;
- Q. Broken glass or sharp objects in aquatic venue or on the deck area;
- R. If pH testing equipment does not measure below 6.8, any pH test at or below the lowest value of the test equipment;
- S. If pH testing equipment does not measure above 8.0, any pH test at or above the highest test value of the test equipment; or
- T. Any other item determined to be a public health hazard by the Department.

7-4. Closure and Reopening. If an aquatic venue is taken out of service, the following conditions shall be met.

- A. Aquatic Venues with an Enclosure. The following two criteria shall be met:
 - 1. Either:
 - a. The water shall be recirculated and treated to maintain compliance with all standards contained herein; or
 - b. The water shall be completely drained; and
 - 2. Either:
 - a. An approved safety cover that is certified, listed and labeled to ASTM F1346-91 by an ANSI accredited certification organization shall be installed; or
 - b. Access to the aquatic venue shall be restricted with no access by any persons other than the license holder or their designate and routine checks of the aquatic venue enclosure shall be made.
- B. Aquatic Venues Without an Enclosure and:
 - 1. Open to the Public: aquatic venue does not have an enclosure and other parts of the aquatic facility are open to the public. Water shall be either recirculated and treated to maintain compliance with all standards contained herein or water shall be completely drained. Then the following actions shall be performed:
 - a. The aquatic venue shall be staffed to keep patrons out;
 - b. An approved temporary barrier for the aquatic venue shall be installed to keep patrons out and routine checks of the integrity of the temporary aquatic barrier shall be made; or
 - c. An approved safety cover that is certified, listed and labeled to ASTM F1346-91 by an ANSI accredited certification organization shall be installed.
 - 2. Closed to the Public: aquatic venue does not have an enclosure and the aquatic facility is closed to the public.
 - a. Either:

1. The water shall be recirculated and treated to maintain compliance with all standards contained herein; or
 2. The water shall be completely drained; and
- b. Either:
1. An approved safety cover that is certified, listed and labeled to ASTM F1346-91 by an ANSI accredited certification organization shall be installed; or
 2. Access to the aquatic venue shall be restricted with no access by any persons other than the license holder or their designate and routine checks of the aquatic venue enclosure shall be made.
- C. Reopening. An aquatic venue shall not be put back into service until it meets all requirements contained herein.

Required plans and procedures.

- 7-5. All required plans shall be written and shall be submitted to the Department for review and approval.
- A. Facilities that have a current license as per the effective date of this code shall develop and submit all required plans within 90 days of the effective date of this code.
 - B. All other facilities shall develop and submit all required plans for review and approval prior to a license being issued.
 - C. After approval, a written copy of each plan shall be maintained onsite and shall be available for review by all employees or by the Department.
- 7-6. All required plans shall at a minimum be reviewed annually. Required updates shall be made annually or more often as necessary to ensure that the plan accurately reflects and pertains to conditions in the aquatic facility.
- 7-7. Operations Plan. All aquatic facilities shall have an operations plan that shall include, at a minimum:
- A. A copy of the approved plans and specifications for, a description of, and the location of each aquatic venue and aquatic feature.
 - B. An inventory of all equipment that shall include:
 1. The equipment name and model number;
 2. Manufacturer, contact information and the equipment manual;
 3. Local vendor/supplier and technical representative, if applicable; and
 4. Replacement or service dates and details.
 5. A plan detailing the manufacturer's recommended or required intervals of service and maintenance for all equipment and logging the dates such service and maintenance was performed.
 - C. A written, comprehensive preventative maintenance plan for each aquatic venue that shall include details and frequency of owner/operator's planned routine facility inspection, maintenance, and replacement of recirculation and water treatment components.
 - D. Plans and records as required for air quality maintenance.
 - E. Copies of the certifications for every employee that has or is required to have a certification (ex. qualified operators and lifeguards).
 - F. Copies of the SDS sheets for all chemicals present in the facility.
 - G. A copy of the SAHS manual (Section 9-26).

- H. A copy of any biohazard action plan as may be required by applicable local, state, territorial, federal and tribal laws.
- I. A copy of the following required plans:
 - 1. Training plan (Section 7-8).
 - 2. Safety plan (Section 7-9).
 - 3. Accidental Chemical Release plan (Section 7-10).
 - 4. Facility Evacuation plan (Section 7-11).
 - 5. Communication plan (Section 7-12).
 - 6. Inclement Weather plan (Section 7-13).
 - 7. Air Quality Operations plan (Section 7-14).
 - 8. Fecal/Vomit/Blood Contamination Response plan (Section 7-17).

7-8. Training Plan. All aquatic facilities shall have a training plan that shall cover, at a minimum, the topics contained herein.

- A. All staff involved in the storage, use, or handling of chemicals or whose job duties may bring them into contact with chemicals shall receive training prior to access of chemicals and receive at least an annual review of procedures thereafter for the following topics:
 - 1. Procedures for chemical storage and handling outlined in this code.
 - 2. Standard precautions, PPE, and other measures to minimize exposure to chemicals as required by OSHA. This shall include staff training in PPE and respiratory protective devices when required.
 - 3. Spill procedures and emergency response outlined in this code.
 - 4. Federal OSHA Requirements: Hazard Communication Standard (Employee Right-to-Know) and SDS. Know the location and availability of the Standard and the written program.
 - 5. The workplace chemicals list and SDS.
- B. The license holder shall have a training plan in place and implement training for employees on chemicals used at the aquatic facility before their first assignment and whenever a new hazard is introduced into the work area. The training shall include at a minimum:
 - 1. How to recognize and avoid chemical hazards,
 - 2. The physical and health hazards of chemicals used at the facility,
 - 3. How to detect the presence or release of a hazardous chemical,
 - 4. Required PPE necessary to avoid the hazards,
 - 5. Use of PPE,
 - 6. Chemical spill response, and
 - 7. How to read and understand the chemical labels or other forms of warning including SDS sheets.
- C. The license holder shall have an Exposure Control Program for bloodborne pathogens as required by OSHA 29 CFR 1910.1030.
- D. Employees assigned to roles which have the potential for an occupational exposure to bloodborne pathogens, pathogens that cause RWI's or other pathogens shall be trained to recognize and respond to body fluid (blood, feces, vomit) releases in and around the aquatic venue area and shall maintain a valid blood borne pathogens training certificate.
- E. Employees shall be provided with training in proper use and disposal of all PPE required for their jobs.
- F. Pre-service Training Plan.
 - 1. The Pre-Service Plan shall include:
 - a. Policies and procedure training specific to the aquatic facility,

- b. Demonstration of safety team skills specific to the aquatic facility prior to assuming on-duty lifeguard responsibilities, and
 - c. Documentation of training.
 - 2. Prior to active duty, all members of the safety team shall be trained on, and receive a copy of, and/or have a copy posted and always available of the specific policies and procedures for the following:
 - a. Staffing plan,
 - b. EAP (Emergency Action Plan),
 - c. Emergency closure, and
 - d. Fecal, vomit, or blood contamination on surfaces and in the water.
 - 3. Prior to active duty, all members of the safety team shall demonstrate knowledge and skill competency specific to the aquatic facility for the following criteria:
 - a. Understand their responsibilities and of others on the aquatic facility safety team,
 - b. Ability to execute the EAP,
 - c. Know what conditions require closure of the facility, and
 - d. Know what actions to take in response to fecal, vomit, or blood contamination on a surface and in the water.
 - 4. When lifeguards are used, they shall be trained on the EAP and receive a copy of or have a copy of the EAP posted and always available at the aquatic facility, specifically including policies and procedures for the following:
 - a. Zone of patron surveillance plan,
 - b. Rotation plan,
 - c. Minimum staffing plan, and
 - d. Rescue/first aid response plan.
 - 5. When lifeguards are used, they shall demonstrate knowledge and skill competency specific to the aquatic facility for the following criteria:
 - a. Ability to reach the bottom at the maximum water depth of the aquatic venue to be assigned,
 - b. Ability to identify all zones of a patron surveillance responsibility to which they could be assigned,
 - c. Ability to recognize a victim in their assigned zone of patron surveillance,
 - d. Ability to reach the furthest edge of the assigned zone of patron surveillance within 20 seconds,
 - e. Water rescue skills outlined in MAHC 6.2.1.1.2,
 - f. CPR/AED and first aid,
 - g. Ability to execute the EAP,
 - h. Emergency closure issue, and
 - i. Fecal, vomit, or blood contamination incident response.
 - 6. The designated person(s) with CPR/AED and first aid training shall present unexpired certificate(s) prior to active duty. Copies shall be maintained at the aquatic facility and be available for review.
 - 7. Documentation verifying the pre-service requirements shall be completed by the person conducting the pre-service training, maintained at the facility for 3 full years, and be available for review.
 - 8. When lifeguards are used, they shall present an unexpired certificate prior to assuming on-duty lifeguard responsibilities. Copies shall be maintained at the facility and be available for review.
- G. In-service training plan.

1. Documentation verifying the in-service requirements shall be completed by the person conducting the in-service training, maintained at the aquatic facility for 3 years and be available for review.
2. Documentation shall include:
 - a. Names of attendees,
 - b. Content of training,
 - c. Date of training, and
 - d. Name of the trainer(s).
3. The in-service training plan shall include:
 - a. In-service training frequency,
 - b. Documentation of in-service training,
 - c. Maintenance of certifications, and
 - d. Demonstration of test ready skills.
4. The designated person(s) with CPR/AED and first aid training shall maintain certifications to show the following:
 - a. CPR/AED training is completed annually, and certificates are unexpired, and
 - b. First aid training certificates are unexpired.
5. When lifeguards are used, they shall be able to demonstrate proficiency in the skills as outlined in MAHC 6.2 and have the ability to perform the following water rescue skills consecutively so as to demonstrate the ability to respond to victims and complete the rescue:
 - a. Reach the furthest edge of zones of patron surveillance within 20 seconds,
 - b. Recover a simulated victim, including extrication to a position of safety consistent with MAHC 6.2, and
 - c. Perform resuscitation skills consistent with MAHC 6.2.

7-9. Safety Plan. All aquatic facilities shall create and implement a safety plan that has procedures, requirements and/or standards related to safety which the aquatic facility staff shall follow.

- A. All staff required in the safety plan shall be provided prior to an aquatic facility beginning operations.
- B. The Safety Plan shall include a Staffing Plan.
 1. The staffing plan shall designate the person(s) that will be members of the safety team and the person(s) for the following responsibilities:
 - a. Identifying and communicating health and safety hazards,
 - b. Mitigating health and safety hazards and closing the facility, if needed,
 - c. Interfacing with the Department relating to the requirements of this code,
 - d. Maintaining water quality and, if required, air quality,
 - e. Enforcing the aquatic facility rules and regulations,
 - f. Responding to reported emergencies,
 - g. Supervising the safety team,
 - h. Conducting pre-service evaluations, and
 - i. Conducting in-service training.
 2. When lifeguards are used, the staffing plan shall include lifeguard rotation procedures such that:
 - a. The lifeguard is capable of viewing the entire area of the assigned zone of patron surveillance,

- b. The lifeguard is able to reach the furthest extent of the assigned zone of patron surveillance within 20 seconds,
 - c. It is identified whether the lifeguard is in an elevated stand, walking, in-water and/or other approved position,
 - d. Any additional responsibilities for each zone are identified, and
 - e. All areas of each aquatic venue are assigned a zone of patron surveillance.
 - 3. When lifeguards are used, the staffing plan shall include rotation procedures such that:
 - a. All zones of patron surveillance responsibility are identified,
 - b. An alternation of tasks is provided such that no lifeguard conducts patron surveillance activities for more than 60 continuous minutes, and
 - c. Coverage is maintained in the zone of patron surveillance during changes of lifeguards.
 - 4. Alternation of tasks may include:
 - a. Change of zone of patron surveillance where the lifeguard must walk or be transported to another zone of patron surveillance.
 - b. Have a period of at least 10 minutes of non-patron surveillance activity such as taking a break, conducting maintenance, or conducting ride dispatch.
 - 5. When lifeguards are used, the staffing plan shall include a lifeguard manager or lifeguard in charge protocols to achieve the requirements of this code.
 - B. The Safety Plan shall include an Emergency Action Plan (EAP).
 - 1. EAPs and operating procedures shall include, but not be limited to:
 - a. Outline the types of emergencies and imminent health hazards,
 - b. Outline the methods of communication between responders, emergency services, and patrons,
 - c. Identify each anticipated responder,
 - d. Outline the tasks of each responder,
 - e. Identify required equipment for each task,
 - f. A facility evacuation plan, and
 - g. Emergency closure requirements.
 - 2. When one or more lifeguards are used, the safety plan and EAP shall identify the best means to provide additional persons to rapidly respond to the emergency to help the initial rescuer.
 - 3. The EAP shall include, at a minimum:
 - a. A diagram of the aquatic facility,
 - b. A list of emergency telephone numbers,
 - c. The location of the first aid kit and other rescue equipment,
 - d. An emergency response plan for accidental chemical release,
 - e. An inclement weather plan,
 - f. A communication plan, and
 - g. A fecal/vomit/blood contamination plan as outlined herein.
 - C. The Safety Plan shall include a Biohazard Action Plan.
- 7-10. Accidental Chemical Release Plan. All aquatic facilities shall create and implement an Accidental Chemical Release plan that shall include procedures for:
- A. Determining when professional hazardous materials (HAZMAT) is needed,
 - B. How to obtain HAZMAT response, when needed,
 - C. Response and cleanup,

- D. Provision for training staff in these procedures, and
 - E. A list of equipment and supplies for cleanup.
 - 1. The equipment and supplies shall be either kept on hand or have reliable availability when needed, and
 - 2. The condition of or availability of equipment and supplies shall be verified by the designated safety team member at least weekly.
- 7-11. Facility Evacuation Plan. A Facility Evacuation Plan shall be created and maintained. This plan shall include at a minimum:
- A. Actions to be taken in cases of drowning, serious illness or injury, chemical handling accidents, weather emergencies, and other serious incidents, and
 - B. Defined roles and responsibilities for all staff.
 - C. Detail emergency exit routes that shall be:
 - 1. Established for all parts of the aquatic facility; and
 - 2. Designed to be well lit, unobstructed, and accessible at all times.
- 7-12. Communication Plan. A Communication Plan shall be created and maintained to facilitate activation of internal emergency response centers and/or community 911/EMS as necessary.
- A. The plan shall include, at a minimum:
 - 1. Provisions and use of readily accessible, appropriate communication devices such as telephones, call boxes and mobile devices,
 - 2. Signage,
 - 3. Procedures to be followed during staffed and unstaffed time periods,
 - 4. Acceptable alternative communication during loss of power, and
 - 5. Training of all personnel.
 - B. The communication plan shall include a plan for notification to federal or tribal, state or territorial, and local agencies in case of a chemical spill that exceeds the EPA reportable quantity.
- 7-13. Inclement Weather Plan. An Inclement Weather Plan shall be created and maintained.
- A. Aquatic facilities shall have a contingency/response plan for localized weather events that may affect their operation (i.e., lightning, tornados, etc.).
 - B. Contingency plans shall include training for employees, evacuation procedures, and determining when it is acceptable to reopen a facility for operation.
- 7-14. Air Quality Operations Plan. An Air Quality Operations Plan shall be created and implemented that shall, at a minimum, function to:
- A. Minimize combined chlorine compounds in an indoor aquatic facility from the operation of aquatic venues.
 - B. Plan for the purging of the air of an indoor aquatic facility in case of chemical emergencies or in the presence of other indicators of poor air quality.
 - C. Include at least the following:
 - 1. A log recording the set points of operational parameters set during the commissioning of the air handling system and the actual readings from the system recorded at least once daily;
 - 2. Records of maintenance done to the system, including dates of filter changes, cleanings and repairs;
 - 3. A record of dates and details of modifications to the air handling system; and
 - 4. A record of dates and details of modifications to the operating scheme.

7-15. Occupancy.

- A. The theoretical peak occupancy for the aquatic facility and for each aquatic venue as specified in the original designs shall not be exceeded.
- B. If the original design is no longer available, theoretical peak occupancy shall be set by the authority having jurisdiction or by the Department.

7-16. Compliance with Policies and Procedures.

- A. All aquatic facilities shall operate in accordance with mandated policies and procedures including, but not limited to, the facilities operating plan, training plan and safety plan.
- B. Failure to comply with Part A above may result in suspension of the aquatic facility license or in the suspension of use of some or all aquatic venues located in an aquatic facility.
- C. Adequate representatives of the safety team shall be present at any aquatic venue at all times when it is open for use by patrons to ensure that all requirements found herein are completed.
- D. Failure to comply with Part C at any aquatic venue shall result in suspension of use of that aquatic venue.

Contamination response.

7-17. Fecal/Vomit/Blood Contamination Response plan. All aquatic facilities shall create and implement a contamination response plan for responding to formed-stool contamination, diarrheal-stool contamination, vomit contamination, and contamination involving blood.

- A. The plan shall include procedures for response and cleanup, provisions for training staff in these procedures, and a list of equipment and supplies required for cleanup.
- B. At all times that an aquatic venue is open for use to patrons, there shall be at least one employee onsite that is:
 - 1. Trained in the procedures for response to formed-stool contamination, diarrheal contamination, vomit contamination, and blood contamination; and
 - 2. Trained in PPE and other OSHA measures including the Bloodborne Pathogens Standard 29 CFR 1910.1030 to minimize exposure to bodily fluids that may be encountered as employees in an aquatic environment.
- C. Staff shall be informed of any updates to the response plan prior to the updated plan being placed into use.
- D. The qualified operator shall maintain an inventory of and ensure availability of any and all equipment and supplies for remediation procedures at least weekly.
- E. In the event of a fecal or vomit contamination in an aquatic venue, the qualified operator or responsible supervisor shall immediately close the aquatic venue to patrons until remediation measures are complete.
- F. Contaminating material and any equipment/supplies used during cleanup shall be removed and disposed of in a sanitary manner.
- G. Any tools/items/equipment used to remove contaminating material shall be thoroughly cleaned using detergent followed by disinfection (equivalent to, at a minimum, immersing the tool/item/equipment in the pool during the disinfection procedure required based on the type of contaminating material).
- H. Aquatic vacuum cleaners or suction devices shall not be used for removal of contaminating material or contamination from the water or adjacent surfaces.

7-18. Aquatic Venue Water Contamination Disinfection.

- A. The following procedure shall be followed (along with any specific requirements for treatment or disinfection as detailed in this section) when any aquatic venue water has been contaminated by feces or vomit:
1. Take the aquatic venue out of service,
 2. Adjust water to a pH of 7.5 or lower,
 3. Verify water temperature is 77 degrees or higher,
 4. Operate the circulation system while the aquatic venue reaches and maintains the proper chlorine concentration during the remediation process,
 5. Test the free chlorine at multiple sampling points to ensure that the proper free chlorine concentration is achieved throughout the aquatic venue for the entire disinfection time with the free chlorine concentration being considered to have been reached only when the lowest tested value has reached the minimum required free chlorine concentration, and
 6. Use only non-stabilized chlorine products to raise the free chlorine during the remediation.
 7. The measurement of inactivation times required in this section shall only begin upon reaching the minimum required chlorine residual throughout the aquatic venue.
- B. Formed-stool contaminated water shall have the free chlorine concentration maintained at 2.0 ppm or higher for at least 25 minutes before placing the aquatic venue back in service.
- C. Aquatic venues with water that contains cyanuric acid that are contaminated by formed-stool contamination shall have the free chlorine concentration maintained at 2.0 ppm or higher for at least 50 minutes before being placed back in service.
- D. Diarrheal-stool contaminated water shall be disinfected using the following procedure:
1. Raise the free chlorine concentration to at least 20.0 ppm and maintain for at least 12.75 hours prior to decreasing the free chlorine to normal operating levels prior to putting the aquatic venue back in service.
 2. If the aquatic venue is equipped with secondary treatment capable of decreasing cryptosporidium oocysts to a level of less than one oocyst per 100 ml of water as detailed in Section 4 of the MAHC then circulating the water through that system may be used in place of Section 7-4(D)(1) above.
 3. For aquatic venues that have water containing cyanuric acid, the following procedure shall be used:
 - a. Follow Section 7-3(K) above,
 - b. Lower the cyanuric acid concentration to less than 15 ppm,
 - c. Raise the free chlorine concentration to at least 20 ppm for at least 28 hours, or at least 30 ppm for at least 18 hours, or at least 40 ppm for at least 8.5 hours, then
 - d. Return the free chlorine and cyanuric acid concentrations to normal operating levels prior to placing the aquatic venue back in service; alternately
 - e. If the aquatic venue is equipped with secondary treatment capable of decreasing cryptosporidium oocysts to a level of less than one oocyst per 100 ml of water as detailed in Section 4 of the MAHC then circulating the water through that system; or alternately
 - f. Draining the aquatic venue completely and cleaning and disinfecting all parts of the circulation system prior to replacing the water.

- E. Vomit-contaminated water shall have the free chlorine concentration at 2.0 ppm or higher and maintained at that level for at least 25 minutes prior to the aquatic venue being put back into service.
 - F. Aquatic venues with water that contains cyanuric acid that are contaminated by vomit shall have the free chlorine concentration maintained at 2.0 ppm or higher for at least 50 minutes before being placed back in service.
 - G. Brominated aquatic venue water shall be treated with chlorine as per Part A-F above. Prior to placing the aquatic venue back in service, bromine and chlorine levels shall be adjusted to be within the required parameters contained herein.
 - H. Blood contamination of properly maintained aquatic venue water does not pose a public health risk for patrons. If done to satisfy patron concerns, the qualified operator may choose to treat blood contamination of the water of an aquatic venue using the same method for treating a formed-stool contamination event.
- 7-19. A Fecal/Vomit/Blood Contamination Response Log shall be maintained to document each occurrence of contamination of the water or its immediately adjacent areas by formed or diarrheal fecal matter, whole stomach discharge of vomit, and blood. The log shall include:
- A. Person conducting the response;
 - B. Qualified operator or responsible supervisor onsite and on duty;
 - C. Date and time of response;
 - D. Specific area, if not in water, contaminated by the event;
 - E. Bather count, or reasonable approximation of the number of bathers in the aquatic venue at the time of the incident (if applicable);
 - F. Type and form of body fluid observed;
 - G. Date and time when the area was closed;
 - H. Concentration of cyanuric acid at time of incident and at the time of reopening to the public (if applicable);
 - I. Free and total chlorine concentration and pH at the time of the incident and the same at the time of the reopening of the aquatic venue to the public;
 - J. Remediation procedure used after the incident; and
 - K. Date and time of reopening.
- 7-20. Legionella Contamination. For remediation and testing of aquatic venues suspected of being contaminated with *Legionella*, the qualified operator shall:
- A. Close the aquatic venue to patrons immediately and shut down all jets, pumps, and features, but do not drain the water.
 - B. Contact the Department regarding sample collection and laboratory testing for *Legionella*.
 - C. Proceed as directed below after samples have been collected (if they are to be collected). If samples have been collected, do not put the aquatic venue back into service until all test results are negative for *Legionella*.
 - D. Scrub all aquatic venue surfaces, skimming devices, and circulation components with a chlorine solution of at least 5 ppm to remove any biofilm or slime.
 - E. Drain (to waste) all water from the aquatic venue.
 - F. Replace filters or filter media. Bag and dispose of as normal solid waste.
 - G. Inspect the aquatic venue thoroughly and make any needed repairs.
 - H. Refill the aquatic venue with clean water.
 - I. Superchlorinate to at least 20 ppm free chlorine. Let the water circulate for at least one hour. After one hour turn on any jets or features and circulate water with at least 20

ppm free chlorine for at least 9 additional hours. Ensure that there is a minimum of 20 ppm free chlorine for the entire 10 hours.

- J. Flush the entire system to remove the superchlorinated water prior to any repeat sampling.
- K. Take any repeat water samples as specified by the Department for laboratory testing to confirm that *Legionella* has been eliminated.
- L. Keep the aquatic venue closed until all repeat testing has confirmed the elimination of *Legionella*. If repeat tests are positive, repeat steps D through K until all tests are negative for *Legionella*. Once all tests are negative, the Department shall be contacted for clearance to put the aquatic venue back in service.
- M. If the aquatic venue is associated with an outbreak, the following continued laboratory testing schedule shall be followed: conduct culture-based testing every 2 weeks for 3 months to ensure complete elimination of *Legionella*. During this schedule, if *Legionella* is found, disinfect again, and start the testing schedule over.

7-21. Surface Contamination Cleaning and Disinfection.

- A. If a bodily fluid has contaminated a surface in an aquatic facility, staff shall limit access to the affected area until remediation procedures have been completed.
- B. Before disinfection, all visible contaminants shall be cleaned and removed with disposable cleaning products effective with regard to type of contaminant present, type of surface to be cleaned, and the location within the facility.
- C. Contaminant removed by cleaning and all cleaning products shall be disposed of in a sanitary manner as required by law.
- D. Contaminated surfaces shall be disinfected with one of the following disinfectant solutions:
 - 1. A 1:10 dilution of fresh bleach with water, or
 - 2. An equivalent EPA-registered disinfectant that has been approved for body fluids disinfection.
- E. The disinfectant shall be left to soak on the affected area for a minimum of 20 minutes or as indicated by the disinfectant manufacturer's label directions.
- F. Disinfectant shall be removed by cleaning and shall be disposed of in a sanitary manner.

Sampling, testing, and record keeping.

7-22. Water Sample Collection.

- A. All water for any required testing shall be collected from the bulk water of the aquatic venue.
- B. Samples shall be collected from at least 18 inches below the surface of the water.
- C. Samples shall be collected from an area with a water depth of at least 3-4 feet when available.
- D. Samples shall be collected only from points between water inlets.
- E. Samples collection sites shall be rotated around the perimeter of the pool with a different site used for each sample collected during a 24-hour period.
- F. Samples collected for water parameter testing shall be tested immediately upon collection of the sample.
- G. Samples for microbiological analysis shall be collected in the middle of the aquatic venue operating day.

7-23. Water parameter testing.

A. Daily:

1. Disinfection residual and pH value testing shall be performed each day prior to any patrons entering or contacting the water from an aquatic venue and prior to any patron entering or contacting the water after a period of time of 2 hours or greater during which the aquatic venue is out of service.
2. Disinfection residual and pH value testing shall be performed at least once every 2 hours during the time the aquatic venue is open for use by patrons.
3. Disinfection residuals and pH values shall be performed no fewer than 4 times per day for any aquatic venue.
4. For those aquatic venues where chlorine is used, the disinfection residual testing shall include testing for free and combined chlorine values.
5. ORP readings shall be recorded each time the disinfection residual is tested.
6. Water temperature shall be recorded each time the disinfection residual is tested for all heated aquatic venues.
7. Cyanuric acid values (if used) shall be tested at least one time per 24-hour period.
8. Copper and silver levels shall be tested at least daily (if applicable).

B. Weekly:

1. Total alkalinity shall be tested at least once weekly.
2. If in-line electrolytic chlorinators are used, salt levels shall be tested as per manufacturer's instructions or weekly, whichever is more frequent.

C. Monthly:

1. Calcium hardness shall be tested at least once monthly.
2. The saturation index shall be calculated at least once a month.

D. Quarterly: TDS shall be tested at least once per 3-month period.

E. No remote water quality monitoring system shall take the place of any mandated water parameter testing.

F. All testing shall be done on site by the qualified operator or responsible supervisor using water collected directly from the aquatic facility being tested.

7-24. An aquatic facility shall maintain a daily log for each aquatic venue located in the facility.

A. The daily log shall include (at a minimum):

1. The dates, times, initials of the person performing the test, and results of all water parameter testing done.
2. A copy of the laboratory generated results for each microbiological test done.
3. A reading from the rate of flow gauge for the circulation system.
4. Records of all equipment calibration (ex. UV sensor calibration, chemical parameter testing equipment calibrations) including the date, initials of person doing the calibration and final result.
5. Records of any filter maintenance or upkeep, including but not limited to backwashing, sand replacement, and cartridge changes.
6. A record of all injuries and illness incidents observed or reported:
 - a. If the incident:
 - i. Results in death,
 - ii. Requires resuscitation, CPR, oxygen, or AED use to be initiated,
 - iii. Requires transportation or treatment of a patron to a medical facility, or
 - iv. Results in a patron or employee being diagnosed with an RWI.
 - b. The record shall include:

- i. Date and time,
 - ii. Location in the facility,
 - iii. Incident information including the type of illness or injury and cause or mechanism,
 - iv. Names and addresses of all individuals involved,
 - v. Actions taken,
 - vi. Equipment used, and
 - vii. Outcome of incident.
 - c. The Department shall be notified within 24 hours of any incident recorded under this section.
- 7. The results of the monthly testing of the chemical feeder interlock system.
- 8. The results of the daily evaluation of all chemical tubing and connections.
- 9. Documentation of any malfunctioning equipment, equipment failure, power outage, or errors.
- 10. Documentation of any interruption of the circulation, filtration, or disinfection systems for more than one hour.
- 11. A record of daily attendance for the aquatic facility.
- 12. The name of the person performing the daily inspection.
- B. The daily log shall be kept on site and available for review for a minimum of three years.

7-25. Aquatic facilities shall keep records pertaining to the operation, maintenance, and management of the aquatic facility for a minimum of 3 years, or for any longer time frame if mandated herein or by law. Such records shall be available for review by the Department.

7-26. If applicable laws require additional records, documentation, or forms then they shall be kept and maintained for at least the minimum time required in law.

7-27. A record shall be kept of all lifeguard rescues where a lifeguard enters the water and activates the aquatic facility EAP. The record shall include:

- A. Date and time;
- B. Lifeguard and patron names and contact information; and
- C. Reason the rescue was needed.

7-28. Equipment Manuals.

- A. Equipment manuals shall be maintained for all equipment.
- B. The equipment manual shall be an original copy from the manufacturer.
- C. If the manual is missing or lost, a new manual shall be obtained.
- D. In a case where the original manufacturer is no longer available, a written document that outlines standard operating procedures for maintaining and operating the piece of equipment shall be created and maintained.

Daily inspection.

7-29. Daily Inspection Items. The qualified operator or responsible supervisor shall ensure that a daily aquatic facility preventive maintenance inspection is done before opening and that it shall include verifying and ensuring that:

- A. Walkways/decks and exits are clear, clean, free of debris;
- B. Drain covers, vacuum fitting covers, skimmer equalizer covers, and any other suction outlet covers are in place, secure, and unbroken;

- C. Skimmer baskets, weirs, lids, flow adjusters, and suction outlets are free of any blockage;
- D. Inlet and return covers and any other fittings are in place, secure, and unbroken;
- E. Safety warning signs and other signage are in place and in good repair;
- F. Safety equipment as required by this code are in place and in good repair, including emergency instructions and phone numbers;
- G. Entrapment prevention systems are operational;
- H. Recirculation, disinfection systems, controller(s), and probes are operating as required;
- I. Secondary treatment and/or supplemental treatment systems are operating as required;
- J. Underwater lights and other lighting are intact with no exposed wires or water in lights;
- K. Slime and biofilm have been removed from accessible surfaces of aquatic venues, slides, and other aquatic features;
- L. Doors to non-public areas are closed and locked;
- M. First aid supplies are stocked;
- N. Emergency communications equipment and systems are operational;
- O. Fecal/vomit/blood incident contamination response plan, materials and equipment are available;
- P. Water features and amenities are functioning in accordance with the manufacturer's recommendations;
- Q. Fencing/enclosures, gates, and self-latching or other locks are tested and are intact and functioning properly, and enclosures so not have nearby furniture to encourage climbing;
- R. Drinking fountains are clean and in functional condition;
- S. Electrical devices are in good working condition and meet the requirements specified herein;
- T. Alarms, if required, are tested, and functioning properly; and
- U. Assessing water clarity to verify that the bottom and objects in the pool are clearly visible.

Chemicals.

7-30. Chemicals.

- A. Chemical handling and use shall comply with OSHA and EPA regulations.
- B. For each chemical, storage, handling, and use of the chemical shall comply with the manufacturer's SDS and labels.
- C. All PPE indicated on any chemical labeling or SDS sheets shall be present on site in quantities and sizes sufficient to accommodate all employees that may work with or come into contact with chemicals and shall be kept in a location that is always accessible by employees.
- D. Superchlorination or shock chemicals and other pool chemicals other than those for disinfection and pH control may be added manually to the pool.
 1. Such manual addition may only be done by the qualified operator or responsible supervisor.
 2. Manual addition of chemicals may only be done during times that the aquatic venue is out of service and patrons are not present.
- E. Chemical Measuring Devices.
 1. Chemicals shall be measured using a dedicated measuring device made for the chemical being used.
 2. Such measuring devices shall be clean, dry, and constructed of material compatible with the chemical to be measured.

- F. Chemicals shall be added to water when diluting as opposed to adding water to concentrated chemicals.
 - G. Mixing or dilution of chemicals shall only be done in a separate, labeled container.
 - H. Two or more chemicals may not be mixed or diluted in the same container or water.
 - I. A chemical inventory log shall be maintained onsite to provide a list of chemicals used in the aquatic venue or aquatic facility that could result in water quality issues, chemical interactions, or patron or employee exposure.
 - 1. This log shall be created and maintained by the qualified operator.
 - 2. This log shall be updated weekly or more often if necessary to reflect the conditions present in the aquatic facility.
- 7-31. The SDS sheets for all chemicals used at the facility shall be kept in clearly labeled binders on site at all locations or places where the chemicals are used or as otherwise required by law, whichever requirement is more stringent.
- A. The SDS sheets shall be alphabetized by the common or working name of the chemical.
 - B. SDS binders shall be updated immediately upon introduction of new chemicals or upon the cessation of use of any chemicals.
 - C. The SDS sheets for chemicals that are no longer kept or used at the facility shall be removed from the binder, but still maintained in the possession of the license holder until all legal requirements for maintenance of such records have been met.
- 7-32. Chemical labeling.
- A. Working containers shall be clearly and legibly labeled with the common or working name of the contents.
 - B. Containers of chemicals shall be labeled, tagged, or marked with the identity of the material and a statement of the hazardous effects of the chemical according to OSHA or EPA materials labeling requirements.
- 7-33. Chemical containers.
- A. Any working containers for any chemicals shall be either a new container that has never contained any chemical, or one only used for a single chemical and only refilled with that same chemical.
 - B. Once emptied of their original contents, manufacturer's containers shall not be used for any purpose and shall be recycled immediately in accordance with law. If such containers are not able to be recycled, then they shall be disposed of in accordance with law.
- 7-34. Chlorine Institute Pamphlet 82 requirements for safe storage and use of chlorine gas shall be followed.
- 7-35. Aquatic facilities that use gas chlorine must be able to meet all the requirements for gas chlorine contained herein. If an aquatic facility cannot meet safety equipment and training requirements, the requirements herein, and all applicable local, state, territorial, federal, and tribal laws, then gas chlorination will no longer be allowed to be used.

Variances.

- 7-36. Variances. The Department may grant a variance by modifying or waiving the requirements of this Code if in the opinion of the Department there is a scientific or documented reason that modifying or waiving the requirements of this Code will not result in a health hazard or an increase of the risk to public safety.
- A. A variance request shall be made in writing by the license holder or proposed license holder.
 - 1. The request shall be signed and dated by the person requesting the variance.
 - 2. The variance request shall be addressed to the Director of Environmental Health and shall be submitted to the Department.
 - B. The variance request shall include the following information:
 - 1. A statement of the proposed variance detailing specifically what part of the Code the variance will be from, including all relevant Code section numbers;
 - 2. A statement detailing the reason for which the variance is being requested; and
 - 3. An analysis of the rationale for how the potential public health hazards addressed by the relevant Code sections will be alternatively addressed if the variance is granted.
 - C. The Department shall review this information and make a determination within 10 days of receiving the variance request. If there is any reason that the determination cannot be made within 10 days, the Department shall notify the license holder with the expected timetable for completing the review of the variance request.
 - D. The Department shall notify the person requesting the variance in writing regarding the Department's decision.
 - E. If the variance request has been denied by the Department, the written notification shall include the reasons for the denial of the request.
 - F. In the event of denial of a variance request, the license holder may request an appeal.
 - 1. A request for an appeal shall be in writing and shall be signed and dated by the person originally requesting the variance.
 - 2. The written request shall be addressed to the Executive Officer of the First District Health Unit.
 - 3. Within 10 days of receiving the request, the FDHU shall notify the license holder of the date and time of the hearing for the appeal.
 - G. If the variance is approved, the Department shall maintain a copy of the variance request and variance request approval in its records for the facility and shall provide a written variance request approval to the license holder.
 - H. The written variance approval shall be maintained upon the premises of the aquatic facility and available for review.
 - I. The written approval shall detail the length of time for which the variance shall be in effect.
 - 1. The written variance approval shall be maintained in the records of the facility and be available for review for at least three years after the date that the variance request approval expires.
 - 2. The written approval shall detail the criteria for renewal of the variance, if applicable.
 - J. The Department is not obligated under any circumstances to approve a request for a variance and may deny such request for any reason.
 - K. If an aquatic facility license is revoked or allowed to lapse, any variance obtained under that license is permanently revoked.

- 7-37. Compliance with variance procedures. If the Department grants a variance the license holder shall comply with the plans and procedures that are submitted and approved as a basis for the modification or waiver.
- A. Documented failure to comply with any conditions specified in a variance shall result in immediate suspension of the variance.
 - B. Upon suspension or revocation of a variance, a license holder shall take any necessary actions to come into compliance with the original Code criteria or requirements for which the variance was granted.
 - C. If Part B can not be met immediately upon suspension or revocation of a variance, the license for the facility shall be suspended until such time as the Department determines that the license holder has come into compliance and that there is not an increased risk to public health or safety.

Patron requirements.

- 7-38. Patrons and employees shall be required to take a cleansing shower prior to contacting water from any aquatic venue.
- 7-39. Any incontinent patrons or employees shall be required to always wear approved swim diapers while in contact with the water of any aquatic venue or when on the wet deck.
- 7-40. Patrons and employees known to have communicable infections shall not be permitted to use or come into contact with the water from any aquatic venue.
- 7-41. Food.
- A. Patrons and employees shall not be allowed to eat or drink while in or partially in any aquatic venue or on the perimeter deck.
 - B. Glass food or beverage containers shall be prohibited in patron areas of aquatic facilities.

Miscellaneous provisions.

- 7-42. For outdoor aquatic venues: in the event of a thunderstorm, all swimmers shall be cleared from all aquatic venues and decks at the first sound of thunder. Bathers shall not be allowed back into the aquatic venue until the threat of lightning has passed.
- 7-43. Animals.
- A. Domestic animals are to be excluded from the basin of any aquatic venue or for coming into contact or contaminating the water of any aquatic venue.
 - B. Reasonable provisions shall be taken to exclude wild animals from any aquatic venue including all decking or splash zone areas.
 - C. Aquatic facilities shall be kept free of rodents and vermin.
 - 1. All aquatic facilities shall have a pest control plan detailing the ways in which infestations of rodents and vermin will be prevented and the steps that will be taken in the event of an infestation to eliminate the infestation.
 - 2. If any kind of rodent or vermin infestation occurs, the license holder shall retain the services of a professional pest control agency to eliminate the infestation and for the necessary duration of time after the infestation is under control to prevent any further infestations from occurring.

7-44. Diaper changing.

- A. Diaper changing is prohibited on any decking or in any aquatic venue.
- B. Diaper changing may only occur at designated diaper changing stations.
- C. Diaper changing stations shall be provided as required and shall be maintained with necessary supplies.

Section 8: Water Quality, Treatment, Filtration, and Circulation

General water quality parameters.

8-1. During all times that water is present in an aquatic venue, all water quality parameters contained herein shall be met.

8-2. Water Clarity.

- A. Water in an aquatic venue shall be sufficiently clear that the bottom is visible at all times while available for use by patrons.
- B. Any required reference tiles shall be used to observe water clarity.
- C. In the absence of a reference tile, the water shall be of sufficient clarity so that the main drain or a standard test disc placed in the deepest area is readily visible from any point on the deck up to 30 feet away in a direct line of sight.
- D. Failure to comply with this section shall result in the aquatic venue being taken out of service.

8-3. The water level for any aquatic venue shall be maintained at the level specified in the original design or at the level necessary to ensure correct functioning of all equipment pertaining to circulation, filtration, and chlorination and to ensure maintenance of approved water chemistry.

8-4. Daily Discharged Water.

- A. A volume of water totaling at least 4 gallons per bather per day shall be either:
 - 1. Discharged from the system to waste, or
 - 2. Treated using an approved alternate system and reused.
- B. The required volume of water to be discharged may include backwash water.

8-5. Water Temperature.

- A. Water temperatures in any aquatic venue shall be considered and planned for based on risk, safety, priority facility usage, and age of participants, while managing water quality concerns.
- B. The maximum temperature for an aquatic venue shall be 104 degrees F.
- C. Any temperature requirements detailed in the manufacturer's operational manuals or on any manufacturer's chemical labels shall be followed so long as they do not conflict with Parts A or B above.

Water testing and testing equipment.

8-6. Microbiological testing.

- A. Any required microbiological testing may only be performed by a laboratory that is approved by the Department.
- B. If a laboratory other than the FDHU Water lab is used, the name and contact information for that lab shall be submitted to the Department and approval granted prior to the lab being used for fulfilling any requirements contained herein.

- C. At a minimum, a microbiological test shall:
 1. Determine the presence or absence of coliform bacterial and E. coli; and
 2. Quantify viable bacteria in a heterotrophic plate count (HPC).
- D. Each aquatic venue is required to have a passing microbiological test:
 1. For each month, or fraction thereof, it is used by or available for use by patrons;
 2. Prior to use by patrons at the beginning of the season of operation for seasonal aquatic venues;
 3. At least twelve times during each calendar year for non-seasonal aquatic venues;
 4. Prior to use by patrons if any aquatic venue undergoes any maintenance or construction that involves shutting down the circulation system for longer than 24 hours; and
 5. Prior to use by patrons if any part of the circulation system of an aquatic venue is replaced.
 6. Prior to being put back into service after a period of non-operation as specified in Section 3-26.
- E. A sample for microbiological testing may only be collected from an aquatic venue for which any water quality parameters are in compliance with the requirements contained herein.
- F. Water samples for microbiological analysis may only be collected from those parts of an aquatic venue where patrons are exposed to or immersed in the water contained in the circulation system for that venue.
- G. Samples for microbiological testing shall be collected and submitted to a lab for analysis prior to the 15th day of each month.
 1. Any aquatic venue that fails to submit a sample by 4:00 pm on the 15th day of the month shall be taken out of service and may not be used by patrons.
 2. Aquatic venues taken out of service as detailed in Part 1 above may not be placed back in service or used by patrons until such time as a passing microbiological test is completed and approval is granted by the Department.
- H. The results of any microbiological testing done by labs other than the FDHU water lab shall be submitted to the Department either electronically or in physical form no later than the 17th day of the month during which the sample was collected. Such results will only be accepted if submitted directly from the lab performing the analysis.
- I. To be considered passing, a microbiological test must:
 1. Test negative for the presence of coliform bacteria and E. coli; and
 2. Have a HPC value that is less than 200 bacteria per milliliter of water.
- J. If an aquatic venue submits a sample for microbiological analysis and the sample is not a passing sample, then that aquatic venue shall be taken out of service and may not be used by patrons until such time as a passing microbiological test is obtained and approval to resume operations is given by the Department.

8-7. Testing Equipment

- A. All aquatic venues shall be equipped with testing equipment for measuring levels of any and every chemical used for disinfection, as well as for pH, calcium hardness, alkalinity, and cyanuric acid (if stabilized chlorine is used). If an aquatic facility uses any other chemical that has a measurable level in aquatic venue water and for which the manufacturer provides a value or range for that chemical, then testing equipment for that chemical or parameter shall also be available.
- B. The range of measurement for each testing parameter shall be broad enough to encompass the entirety of values referenced or required herein or on any manufacturer's label.

1. Free and total chlorine residual readings shall be able to be tested in the range of 0 ppm to 11 ppm.
2. pH readings shall be able to be tested in the range of 6.8 to 8.0.
- C. The gradations of the range of measurement shall be fine enough to make an accurate determination of the level in the water of the aquatic venue and to encompass the entirety of values contained herein or on any manufacturer's label.
 1. Free and total chlorine residual readings shall be able to be tested in steps no larger than 0.2 ppm.
 2. pH readings shall be able to be tested in steps no larger than 0.2.
- D. The testing equipment shall be stored to protect it from extremes in temperature and from contamination. Testing equipment shall be stored and maintained as specified by the manufacturer if such information is provided or available.
- E. Test strips or sticks may not be used to fulfill the testing equipment requirement for disinfection residuals, pH, calcium hardness, alkalinity, or cyanuric acid.
- F. Reagents or other test kit materials shall not be used past any manufacturer's labeling indicating a use by date or expiration date.
- G. All reagents in testing equipment for seasonal aquatic facilities shall be replaced with new reagents prior to the beginning of operations for the season.
- H. Any testing equipment that requires calibration shall be calibrated in accordance with manufacturer's instructions and all calibrations recorded in the daily log.
- I. Testing equipment and all tests performed shall only be done as per the manufacturer's printed directions for the testing equipment. A legible, current copy of the manufacturer's printed instructions for the testing equipment shall always be kept with the testing equipment.
- J. Failure to comply with this section shall result in suspension of the aquatic facility license and all aquatic venues being taken out of service until such time as compliance is achieved and maintained.

Water chemistry parameters.

8-8. pH

- A. pH shall be maintained in the range of 7.0 to 7.8 in all aquatic venues.
- B. pH levels outside the range specified in Part A shall result in the aquatic venue being taken out of service.
- C. Chemicals used for pH adjustment shall be certified, listed, and labeled to either NSF/ANSI 50 or NSF/ANSI 60 by an ANSI-accredited certification organization, and/or have an EPA/FIFRA registration.

8-9. Chlorine.

- A. Only those chlorine products that are EPA registered for use as sanitizers or disinfectants in aquatic venues in the U.S. shall be used.
- B. If a free chlorine residual of 1ppm or less is tested in any aquatic venue, that aquatic venue shall be taken out of service and may not be used by patrons until the free chlorine residual required herein is reached and maintained.
- C. Spas shall maintain a minimum free chlorine that is 3 ppm or higher.
- D. All other aquatic venues shall maintain a minimum free chlorine that is 2 ppm or higher.
- E. Free chlorine levels shall be maintained at or below any maximum levels specified on any product labeling. Any products where the label states a maximum free chlorine level that is below any minimum required herein shall not be used.

- F. All aquatic venues shall maintain a free chlorine that is below 10 ppm at all times they are in use by patrons.
- G. Combined chlorine levels shall be less than 0.4 ppm. If combined chlorine levels exceed 0.4 ppm, steps shall be taken to reduce the level of combined chlorine to zero within 24 hours.

8-10. Aquatic Venue Water Chemical Balance

- A. Total alkalinity shall be maintained in the range of 60-180 ppm.
- B. Calcium hardness shall not exceed 2500 ppm.
- C. The water at any aquatic venue shall be chemically balanced.
- D. The saturation index shall be such that the water is neither scale forming nor corrosive.

Chemicals/Disinfectants/UV/Superchlorination.

8-11. Only treatment chemicals that have been certified, listed, and labeled to either NSF/ANSI 50 or NSF/ANSI 60 by an ANSI-accredited certification organization, and/or have an EPA/FIFRA registration shall be used and shall only be used in accordance with manufacturer's instructions and so as to not violate any requirements contained in this code.

8-12. The following products are prohibited from use:

- A. Cyanuric acid in any form in any indoor aquatic venue, spa, or therapy pool.
- B. Ozone (except as allowed in Section 10).
- C. Polyhexamethylene Biguanide (PHMB).
- D. Chlorine dioxide.

8-13. Cyanuric acid.

- A. May only be used in outdoor aquatic venues if it is part of an approved, stabilized chlorine product (ex. dichlor or trichlor).
- B. The cyanuric acid level shall be maintained at or below 90 ppm.

8-14. Salt Electrolytic Chlorine Generators, Brine Electrolytic Chlorine or Bromine.

- A. The saline content of the aquatic venue water shall be maintained in the required range as specified by the manufacturer.
- B. Cleaning of electrolytic plates shall be performed as recommended by the manufacturer.
- C. Corrosion protection systems shall be maintained in the aquatic venue basin.
- D. The original manufacturer's product manual and operating instructions shall be maintained on site and available for review for all chlorine generation equipment.

8-15. Other Sanitizers, Disinfectants or Chemicals

- A. Only products and systems that are EPA registered for use as sanitizers or disinfectants in aquatic venues in the United States shall be used.
- B. All products used shall be EPA registered under FIFRA if they are pesticides as defined by EPA.
- C. No products shall create a hazardous condition or compromise disinfectant efficacy when used with required chlorine or bromine concentrations.
- D. No product that interferes with water quality measures meeting all criteria set forth in this code shall be used.

- E. If a compound or process other than chlorine is used for disinfection, and the residual maintained falls below a level that is equivalent to the effectiveness of 1 ppm of free chlorine, then that aquatic venue shall be taken out of service.
- F. If an aquatic venue uses a disinfection method other than chlorine, the method shall provide a disinfection and residual level equal to that provided by chlorine. If the disinfection method used does not provide a disinfection residual, then an approved means of obtaining the required free chlorine residual shall be provided.
- G. Bromine
 - 1. Only the following bromine compounds may be used:
 - a. 1,3-dibromo-5,5-dimethylhydantoin (DBDMH), or
 - b. 1-bromo-3-chloro-5,5-dimethylhydantoin (BCDMH).
 - 2. Bromine concentrations shall be maintained between 4 ppm and 8 ppm. Bromine levels outside this range shall result in the aquatic venue being taken out of service.
- H. Copper/silver ions
 - 1. Copper concentrations shall not exceed 1.3 ppm.
 - 2. Silver concentrations shall not exceed .10 ppm.
- I. Clarifiers, Flocculants, Defoamers
 - 1. Shall be used only as per the label and manufacturer's instructions.
 - 2. Shall be certified, listed, and labeled to either NSF/ANSI 50 or NSF/ANSI 60 by an ANSI-accredited certification organization or have an EPA/FIFRA registration.

8-16. Ultraviolet light

- A. A UV system shall only operate while the circulation system is operating.
- B. An interruption in UV system operations that is triggered by an interlock shall be evaluated as possible evidence for low flow state of the aquatic venue pumps, and the aquatic venue shall be taken out of service.
- C. Secondary UV systems shall be operated and maintained not to exceed the maximum validated flow rate and meet or exceed the minimum validated output intensity needed to achieve the required dose.
- D. The presence of an UV light system does not modify any other water quality requirements.
- E. UV sensors shall be calibrated at a frequency in accordance with manufacturer recommendations.
- F. The mandatory automated UV shut-down alarm required in Section 5 shall be tested weekly and maintained as needed.
- G. The dates of and all results from any calibration of UV sensors shall be recorded in the daily log for the facility.
- H. When a UV system is utilized as a secondary treatment, the system shall be monitored and data recorded at a frequency consistent with MAHC Table 5.7.3.7.8 (below).

Table 5.7.3.7.8: UV System Monitoring and Calibration Frequency

Parameter	Monitoring Frequency	Recording Frequency
Flow Rate Monitoring	Continuous	Every 4 Hours
Intensity Monitoring	Continuous	Every 4 Hours
Water Temperature Monitoring (Medium Pressure)	Continuous	Daily
Set Point for Intensity Monitoring	Continuous	Daily
UV Lamp On/Off Cycle Monitoring	Continuous	Weekly (Total Cycles/Week)
Iron, Calcium Hardness Monitoring	Weekly (If Fouling is Prevalent)	Weekly
Calibration of UVT Analyzer (if used)	Per Manufacturer's Requirements	At Time of Calibration
Calibration of Intensity	Per Manufacturer's Requirements	At Time of Calibration
Calibration of Flow Meter	Per Manufacturer's Requirements	At Time of Calibration

- 8-17. Algaecides used in an aquatic venue shall be:
- A. Labeled for use as an algaecide for aquatic venue use;
 - B. Used in strict compliance with label instructions; and
 - C. Registered with the EPA and applicable state agency.
- 8-18. Superchlorination. The following procedure shall be followed when superchlorinating any aquatic venue.
- A. The free chlorine shall be brought to a level that is at least 10 ppm higher than the normal required operating level for that aquatic venue for a period that is at least 4 times the maximum allowed turnover time for that aquatic venue or 12 hours, whichever is longer.
 - B. An aquatic venue shall be taken out of service prior to being superchlorinated.
 - C. Any required Superchlorination may only be done using chlorine products meeting all other criteria contained herein.
 - D. All water chemistry parameters shall be within required ranges prior to the aquatic venue being placed in service.
 - E. All seasonal aquatic venues, any aquatic venue that has had the circulation system shut off for a period of time that is 24 hours or longer, and any aquatic venue that has failed mandatory, or any other, microbiological analysis shall be superchlorinated prior to being placed in service.

Section 9: Physical Facilities

Cleaning/Maintenance/Operation.

- 9-1. For any aquatic facility that was constructed and in operation prior to the date of implementation of this code, all parts of the physical facility shall be used, operated, and held to the standards found in Section 5 for aquatic facility construction and design.
- A. All required equipment for new construction shall be installed and functional on the date of implementation of this regulation.

- B. If such equipment is not installed and functional on the date of implementation of this regulation, the license holder shall submit a plan to the Department within 30 days of the date of implementation. This plan shall detail the deficiencies of the existing equipment as compared to the requirements of Section 5 and detail the timeframe for achieving compliance.
 - 1. If the Department approves this plan, it shall be carried out as written.
 - 2. If the Department rejects this plan, the Department may suspend the license of the aquatic facility.
- 9-2. All parts of the physical facility and everything contained therein shall be maintained in a state of good repair, so that all original and intended functionality is maintained, and so that there is no increased health or safety risk from use over that initially present when new.
- 9-3. All parts of the physical facility and everything contained therein shall be maintained clean to sight and touch, including being free of visible mold and mildew.
- 9-4. Spa Water Drainage/Replacement.
 - A. Aquatic facilities that are spas shall be drained, cleaned, scrubbed, and have the water replaced as calculated in Parts B and C below, or more often as necessary to maintain water clarity and quality.
 - B. The water replacement interval (in days) shall be calculated by dividing the spa volume (in gallons) by 3 and then dividing by the average number of users per day; or at a minimum every 14 days.
 - C. Spa surfaces, including the interiors of skimmers, shall be scrubbed or wiped down and all water drained prior to a refill.
- 9-5. Scheduling inspection and service for a water system device. A device such as a water treatment device or backflow preventer shall be scheduled for inspection and service in accordance with manufacturer's instructions and as necessary to prevent device failure based on local water conditions, and records demonstrating inspection and service shall be maintained by the license holder.
- 9-6. An indoor aquatic facility shall maintain the following indoor conditions:
 - A. Air temperature shall be controlled to the original specifications.
 - B. If the original specifications are not available, the temperature shall be controlled to maintain the dew point of the interior space less than the dew point of the interior walls at all times to prevent damage to structural members and to prevent biological growth on walls.
 - C. Artificial illumination shall be provided and operated as necessary to provide:
 - 1. 30 horizontal footcandles (323 lux) at the indoor water surface.
 - 2. 10 horizontal footcandles (108 lux) at the outdoor water surface.
 - 3. 10 horizontal footcandles (108 lux) at the deck.
- 9-7. The decking shall be:
 - A. Cleaned and disinfected daily;
 - B. Maintained free of standing water;
 - C. Checked daily to ensure that any drains are clean and free of blockages; and
 - D. Maintained free of fixed equipment, loose equipment and deck furniture that could intrude on the aquatic venue circulation path.

Circulation system and components including chemical feeders and automated controllers.

- 9-8. Circulation system. The circulation system (including monitoring, filtering, and chemical feeding equipment) shall be operated continuously at all times during the season of operation of any aquatic venue.
- A. The circulation system shall be operated at the rate of flow specified on the original design submitted to and approved by the Department. This rate of flow shall be posted permanently in the mechanical room in the immediate vicinity of the rate of flow gauge.
 - B. In the event that the value specified in Part A is not known, the rate of flow shall not be less than that necessary to ensure that the aquatic venue meets the required turnover rate without exceeding the filter media rate.
 - 1. If the value specified in Part A is not known, the qualified operator shall obtain the accurate volume in gallons of the water in the aquatic venue and use that value to determine the flow rate required to meet the required turnover time.
 - 2. The volume in gallons and required rate of flow shall be recorded in the operations plan for the aquatic facility.
 - 3. If the required rate of flow exceeds the filter media rate for the filtration media used for that aquatic venue, the aquatic venue shall be taken out of service until such time as the filter is replaced so as to bring the aquatic venue into compliance with the turnover time requirement and the filter media rate requirements.
 - C. The circulation system and all components thereof shall be operated in such a way so as to function and maintain water quality parameters in the same manner as a system designed, installed, and operated in compliance with Section 5. If any part of the circulation system prevents compliance with this section, then that aquatic venue shall be taken out of service until such time as compliance can be met and maintained.
 - D. A circulation system may be operated at a reduce flowrate:
 - 1. Only during the time when the pool is closed according to posted closure hours;
 - 2. The system flowrate may not be reduced more than 25 percent below the minimum design requirements;
 - 3. At no time while the flowrate is reduced can any water quality parameters not meet the minimum requirements contained herein; and
 - 4. The flow rate is returned to normal, and all water quality parameters verified as being in compliance prior to any patrons contacting the water from the aquatic venue.
- 9-9. Filters.
- A. Filters shall be backwashed, cleaned, and maintained according to the manufacturer's directions.
 - B. Filters and filter media shall be certified, listed, and labeled to NSF/ANSI 50 by an accredited certification organization.
 - C. Granular Media Filters.
 - 1. Granular media filter systems shall be backwashed at a rate of at least 15 GPM per square foot of filter bed surface area unless explicitly prohibited by the filter manufacturer and/or approved at an alternate rate as specified in the NSF/ANSI 50 listing as per Section 5.
 - 2. Backwashing should be continued until the water leaving the filter is clear.
 - 3. Filter backwashing, cleaning and maintenance shall only be performed when the aquatic venue is closed for patron use.

4. Patrons may not be permitted to enter or come into contact with water from an aquatic venue until the qualified operator ensures that the recirculation pump and chemical feeders have restarted and run for a minimum of 5 minutes following backwashing.
5. Sand or other granular media shall be inspected for proper depth and cleanliness at least one time per year, replacing the media when necessary to restore depth or cleanliness.
6. The manual air release valve of a filter shall be opened as necessary to remove any air that collects inside of the filter as well as following each backwash.
7. Any products used to enhance filter performance shall be manufactured and labeled for such purpose and shall only be used in compliance with manufacturer's recommendations so long as doing so does not violate any other requirements contained herein.

D. Precoat Filters

1. The media type and quantity shall be that recommended by the filter manufacturer.
2. Precoating of the filters shall be done in closed loop (precoat) mode to minimize the potential for media or debris to be returned to the pool.
3. Flow through the filter shall not be interrupted when switching from precoat mode to filtration mode unless the filters are certified, listed, and labeled to NSF/ANSI 50 by an ANSI-accredited certification organization to return water to the aquatic venue during the precoat process.
4. When a flow interruption occurs on precoat filters not designed to bump, the media shall be backwashed out of the filter and a new precoat established according to the manufacturer's recommendations prior to patrons reentering or coming into contact with water from the aquatic venue.
5. Systems designed to flow to waste while precoating shall use the maximum recommended precoat media load permitted by the filter manufacturer to account for media lost to the waste stream during precoating.
6. Backwashing or cleaning of filters shall be performed at a differential pressure increase over the initial clean filter pressure as recommended by the filter manufacturer unless the system can no longer achieve the design flow rate.
7. Continuous filter media feed equipment tank agitators shall run continuously.
8. Filter media feed may also be performed via batch application.
9. Bumping a precoat filter shall be performed in accordance with the manufacturer's recommendations.
10. Diatomaceous Earth (DE) when used, shall be added to precoat filters in the amount recommended by the filter manufacturer.
11. Perlite, when used, shall be added to precoat filters in the amount recommended by the filter manufacturer and in accordance with the specifications for the filter listing and labeling to NSF/ANSI 50 by an ANSI-accredited certification organization.

E. Cartridge Filters.

1. Cartridge filters shall be operated in accordance with the filter manufacturer's recommendations and be certified, listed, and labeled to NSF/ANSI 50 by an ANSI-accredited certification organization.
2. One full set of spare cartridges shall be maintained on premises in a clean and dry condition.
3. Active filter cartridges shall be exchanged with clean filter cartridges at a differential pressure increase over the initial clean filter pressure as

recommended by the filter manufacturer unless the system can no longer achieve the design flow rate.

4. The filter housing and filter cartridges shall be cleaned as per the manufacturer's recommendations.
5. In the absence of manufacturer's cleaning procedures, the filter housing shall be cleaned using the following procedure:
 - a. Drain the filter housing to waste;
 - b. Remove the filter cartridges from the housing;
 - c. Clean the inside of the filter housing with a brush and mild detergent to remove biofilms and algae;
 - d. Rinse thoroughly; and
 - e. Mist the filter housing with chlorine bleach at a 1:10 dilution.
6. In the absence of manufacturer's cleaning procedures, the filter cartridges shall be cleaned using the following procedures:
 - a. The cartridge shall be rinsed thoroughly with a spray nozzle using standard tap water pressure; a pressure washer shall not be used.
 - b. Cartridge filters shall be degreased each time they are cleaned.
 - c. The cartridge shall be soaked overnight in one of the following:
 - i. A cartridge filter cleaner/degreaser used per the label instructions,
 - ii. A solution of water with 1 cup of tri-sodium phosphate per 5 gallons of water, or
 - iii. One cup of automatic dishwashing detergent per 5 gallons of water.
 - d. No acid products may be used prior to the cartridge filters being degreased.
 - e. The filter cartridge shall be removed from the degreaser solution and rinsed thoroughly.
 - f. The filter cartridge shall be sanitized by soaking for 1 hour in a chlorine solution made by mixing 1 quart of household bleach per 5 gallons of water.
 - g. After being sanitized, the filter cartridges shall be rinsed thoroughly and allowed to air dry.

9-10. Chemical Feed Equipment.

- A. All disinfectant and pH control chemicals shall be delivered only through automatic chemical feed systems.
- B. All chemical feed system components shall be dedicated to a single chemical and shall be clearly labeled to prevent the introduction of incompatible chemicals.
- C. Chemical feed components shall be interlocked so that chemical feeders cannot operate when the recirculation system is in low or no flow circumstances as per Section 5.
- D. If the interlock is activated stopping chemical feed, or if the recirculation pump is stopped for any reason or duration, all patrons shall be evacuated from the aquatic venue. Patrons may not be allowed into or allowed to contact water from the aquatic venue until such time as the qualified operator has determined through evaluation that normal recirculation and chemical feed has resumed and that all water parameters are within the acceptable range and the system has operated normally for no less than 5 minutes.
- E. Chemical feed system components shall incorporate failure-proof features so that chemicals cannot feed directly into the aquatic venue, any venue piping system not associated with the recirculation system, source water supply system, or area within

proximity of the aquatic venue deck under any type of failure, low flow, or interruption of operation of the equipment and so prevent exposure of patrons and staff to any high concentrations of treatment chemicals.

- F. Unless specified otherwise by the device manufacturer, the chemical feeder interlock shall be tested at least monthly by turning off recirculation pump flow to the chemical feeder and ensuring triggered shutoff of chemical feeder occurs via interlock with flow meter/flow switch, paddle wheel or other device being used to assess flow to chemical feeder.
 - 1. Upon completion of the test, recirculation flow shall immediately be restarted.
 - 2. This testing shall only be conducted when the aquatic venue is not open for use by patrons.
- G. No chemical storage containers, other chemical feeders or electrical equipment may be stored or located under any chemical feeders.
- H. Dry chemicals shall be kept dry and free of clumping and so as to ensure consistent feeding and to prevent feeder plugging.
- I. Chemical feeding mechanisms shall be cleaned and lubricated as per manufacturer's recommendations or as often as necessary to maintain reliable feeding.
- J. Adequate pressure shall be maintained at any venturi inlets to create the necessary vacuum to draw the chemical into the recirculation system.
- K. Erosion feeders shall only be used with chemicals approved by the manufacturer.
- L. Feeders may only be opened after internal pressure is relieved by a bleed valve.
- M. For liquid solution feeders, at least one complete set of spare feeder tubes or tubing shall be maintained onsite for all peristaltic pumps.
- N. All chemical tubing, connections, support, and double containment piping shall be checked on a daily basis for leaks. The results of the check and initials of the person conducting the check shall be recorded in the daily log.
- O. Chemical tubing that runs through areas where staff works or where patrons could have access to it shall be routed in piping for the entire run of the tubing through those areas.
 - 1. The piping shall be resistant to the chemical in the tubing.
 - 2. The piping shall be sufficient to prevent any exposure of staff or patrons to the chemicals in the tube from leaks.
 - 3. Turns in the piping shall be designed to prevent kinking of the chemical tubing.
- P. Carbon Dioxide.
 - 1. Carbon dioxide will only be permitted for use in reducing pH.
 - 2. A CO₂/O₂ alarm and monitor shall be present and functional.
 - 3. Forced ventilation shall be maintained in areas of storage and use.
- Q. Chemical equipment used in controlling the quality of water shall be certified, listed, and labeled to NSF/ANSI 50 by an ANSI-accredited certification organization and used only in accordance with the manufacturer's instructions.

9-11. Automated Controllers.

- A. Each aquatic venue is required to have an automated controller that continuously monitors disinfectant residuals and pH levels and that controls the feed of chemicals for maintaining disinfectant residual levels and pH levels.
- B. Automated controller settings and controls shall be restricted to access by only the qualified operator. The adjustment of settings or access of the automated controller for any purpose other than recording measured values by anyone other than the qualified operator is prohibited.
- C. The sample line for all probes shall be upstream from all primary, secondary, and supplemental treatment injection ports or devices.

- D. Automated controllers shall be monitored in person by visual observation at the start of the day and as necessary during operations to ensure proper functioning.
- E. Only manufacturer-approved OEM replacement parts shall be used.
- F. Automatic controllers shall be calibrated per manufacturer's directions and only by the qualified operator or by a trained service technician.
- G. If an automatic controller is equipped with any indicators or alarms that indicate that the controller or conditions monitored by the controller are out of compliance with manufacturer's recommendations for proper functioning, and if those indicators or alarms are activated, then the aquatic venue shall be taken out of service until such time as the conditions leading to the indicator or alarm being triggered are remediated and correct functioning of the controller is verified by a trained service technician.

9-12. Non-Recirculating Aquatic Venues.

- A. Equipment shall be in place to ensure that features discharging water are functioning and discharge water only while patrons are present and using the features.
- B. All features discharging water shall be equipped with low flow nozzles or apertures to minimize the amount of water discharged to waste.
- C. Features shall be controlled to allow the discharge of water only during the posted hours of operation of the aquatic facility.
- D. At all times, the water discharged from the system must meet all requirements for potable water.
- E. If, at any time, water conservation rules or orders are issued or enacted, non-recirculating aquatic venues shall be removed from service and may not be placed back into service until approval is given by the Department.

9-13. Aquatic Feature.

- A. Aquatic feature pumps shall be started prior to opening to the public every day and allowed to run long enough to thoroughly flush all lines with properly chlorinated and treated water.
- B. The water from the features shall be tested for free chlorine, total chlorine and pH and the values shall meet the requirements for aquatic venue water prior to patrons being allowed to contact the water.

9-14. Skimmer Water Levels. The water level shall be maintained near the middle of skimmer openings.

9-15. Strainer Baskets.

- A. The strainer baskets for skimmers shall be cleaned at least once daily, and more often as necessary to maintain proper skimming.
- B. Any other strainers or strainer baskets shall be cleaned as required to maintain correct operation of pumps and any other part of the circulation system.
- C. The circulation system shall only be operated with all strainers and strainer baskets in place.

9-16. Submerged Drains/Suction Outlet Covers or Gratings.

- A. Manufacturer's documentation on all outlet covers and sumps shall be made part of the permanent records of the aquatic facility.
- B. Loose, broken, or missing suction outlet covers and sumps shall be secured or replaced immediately and in compliance with the manufacturer's requirements. The aquatic venue shall be taken out of service until compliance with this Part is obtained.

Structural and other building requirements.

9-17. Chlorine Gas.

- A. Chlorine gas cylinders and chlorinators shall be housed in a separate room or enclosure used for no other purpose and isolated from any other equipment room, any aquatic venue, any corridors, dressing rooms/bathhouses and any other space used by patrons.
- B. The room or enclosure shall have a door with an inspection window installed so as to prevent gas leakage and to allow inspection of all areas of the room or enclosure prior to entry.
- C. Chlorine cylinders shall be secured to prevent tipping or falling.
- D. Chlorine cylinders in use shall be secured on a suitable platform.
- E. A separate vent opening to the exterior shall be provided.
- F. An electric motor-driven fan shall take suction from near the floor level of the room or enclosure and discharge at a suitable point to the exterior above the ground level.
- G. The fan switch shall be able to be operated from outside of the room or enclosure.

9-18. Barriers and Enclosures.

- A. All required enclosures shall be maintained to prevent unauthorized entry into the protected areas.
- B. All primary public access gates or doors serving as part of an enclosure shall have functional self-closing and self-latching closures unless the gate or door meets the exceptions found in Section 5 and staff and qualified lifeguards are provided as required herein.
- C. Gates or doors used solely for after-hours maintenance shall remain locked at all times when not in use by staff.
- D. Required self-closing and self-latching gates or doors serving as part of a guarded enclosure may be maintained in the open position when the aquatic venue is open and staffed as required.

9-19. Moveable Floors.

- A. The use of starting platforms in the area of a moveable floor shall be prohibited when the water depth is shallower than the minimum required water depth of 4 feet.
- B. When a moveable floor is installed into a diving pool, diving shall be prohibited unless the diving pool depth meets the criteria set in MAHC 4.8.2.1.1.

9-20. Bulkheads.

- A. If a bulkhead is operated with an open area underneath, no one shall be allowed to swim beneath the bulkhead.
- B. The bulkhead position shall be maintained such that it cannot encroach on any required clearances of other features such as diving boards.

9-21. Laundry Facilities.

- A. Laundry facilities shall be used only for the washing and drying of items used in the operation of the aquatic facility.
- B. Laundry rooms may not be used for activities other than laundry and may not be used for storage of anything not used during the laundering process.

9-22. Living Areas. In aquatic facilities, the following criteria shall be observed:

- A. A private home, a room used as personal living or sleeping quarters, or an area directly opening into a room used as personal living or sleeping quarters may not be used for conducting any aquatic facility operation.
- B. No space, equipment or any other item that is used for or in a personal home shall be used in any manner for or in an aquatic facility.
- C. Living or sleeping quarters located on the premises of an aquatic facility shall be separated from rooms and areas used for aquatic facility operations by complete partitioning and solid self-closing doors.

9-23. Utility sinks.

- A. All aquatic facility buildings equipped with running water shall be equipped with, or have reasonable access to, at least one utility sink or curbed cleaning facility with a floor drain for the cleaning of mops or similar wet floor cleaning tools and for the disposal of mop water or similar liquid wastes.
- B. The use of toilets, urinals, utensil washing or equipment washing sinks for disposal of mop water or similar liquid wastes is prohibited.

9-24. Outdoor Areas – surface characteristics.

- A. The outdoor walking and driving areas and any areas for the collection or storage of trash/waste or locating trash receptacles shall be surfaced with concrete, asphalt, or gravel or other materials that have been effectively treated to minimize dust, facilitate maintenance, and prevent muddy conditions.
- B. Exterior surfaces of aquatic facility buildings and any other structures located on premises shall be of weather-resistant materials and shall comply with law.

9-25. Lighting.

- A. Lighting systems shall be maintained in all patron areas and maintenance areas to meet all required light levels.
- B. At all times, lighting levels shall be adequate so that the main drain is visible from the perimeter deck. Failure to meet this requirement shall result in the aquatic venue being taken out of service.
- C. Underwater lights, when provided, shall be functioning and in use during times an aquatic venue is available to use by patrons.
- D. If lenses on underwater lights are cracked, the aquatic venue shall be taken out of service until the lenses are replaced.
- E. Branch circuits that supply underwater lights operating at more than the Low Voltage Contact Limit as defined in NEC 680.2 shall be GFCI protected. Operation of an unprotected underwater light circuit is prohibited.
- F. Night swimming is prohibited at any aquatic venue unless minimum required lighting levels are provided.

9-26. Ventilation.

- A. Air handling systems shall be operated as designed and so as to protect the health and safety of patrons.
- B. Air handling systems shall be operated continuously.
- C. During periods of non-use of the aquatic facility, the amount of outdoor air may be reduced by no more than 50% so long as acceptable air quality is maintained.
- D. The license holder shall implement a program of Standard Air Handling System (SAHS) operation, maintenance, cleaning, testing, and inspection procedures with detailed instructions, necessary equipment and supplies, and oversight for those carrying out

such duties. The program shall be based on and in accordance with any manufacturer's manual, requirements, or recommendations. The program shall be documented in the SAHS Manual.

- E. Air filters shall be replaced or cleaned in accordance with the manufacturer's recommendations or when air quality or system operation becomes affected, whichever is more frequent.

9-27. Outdoor openings.

- A. At indoor aquatic facilities, all openings to the outside shall be protected to prevent entry by animals.
- B. If openable for ventilation, openings shall be protected by screening that is at a minimum 16 mesh to the inch.

9-28. Hygiene Facilities.

- A. Hygiene facility fixtures, showers, dressing area fixtures, and furniture shall be cleaned and sanitized daily with EPA-registered products, and more often if necessary to provide a clean and sanitary environment.
- B. Hand washing stations shall include:
 - 1. Hand washing sink,
 - 2. Single use towels or hand drying devices,
 - a. Single-use towels shall only be provided with a dedicated towel dispenser.
 - b. Common use or cloth towels are prohibited.
 - 3. Cleansing liquid or granular soap in a dispenser, and
 - 4. A lined trash receptacle located immediately adjacent to the sink.
- C. Rinse showers shall be easily accessible to patrons at all times and shall not be blocked or obstructed by equipment or furniture.
- D. Soap dispensers and use of soap are prohibited at rinse showers.
- E. Diaper changing stations.
 - 1. Diaper-changing stations shall be stocked with all necessary supplies.
 - 2. An EPA-registered disinfectant shall be provided in the form of either a solution in a spray dispenser with a supply of paper towels in a dispenser or pre-moistened wipes contained within a dispenser.
 - 3. Single use covers where provided shall be of sufficient size to completely cover the station and material to keep the unit clean.
 - 4. Diaper-changing stations shall be cleaned and disinfected at least once daily and more often as necessary to provide a clean and sanitary environment.
- F. Wooden racks, duckboards and wooden mats shall be prohibited on hygiene facility and dressing area flooring.

9-29. Chemical storage.

- A. Chemical storage shall comply with all applicable local, state, territorial, federal, and tribal laws.
- B. Chemicals shall be stored to prevent access by all unauthorized persons.
- C. Chemicals shall be stored to be prevented from getting wet.
- D. Chemicals shall be stored to prevent any mixing of incompatible materials (ex. from leaking containers).
- E. Possible ignition sources (including but not limited to gasoline, diesel, natural gas- or gas-powered equipment such as lawn mowers, motors, grills, pool heaters, or portable

- stoves) shall not be stored or installed in the chemical storage space and chemicals may not be stored in spaces where possible ignition sources are located.
- F. Smoking shall be prohibited within 100 feet of chemical storage spaces or any containers of chemicals.
 - G. Chemical storage spaces or places where chemicals are used shall have at a minimum 30 footcandles (323 lux) of lighting and conditions that allow employees or other persons to read labels on chemical containers.
 - H. Chemicals shall be stored away from direct sunlight, temperature extremes, and high humidity.
 - I. Chemical storage spaces shall be separate from any mechanical or equipment rooms.
 - J. Warning signs in compliance with NFPA or HMIS ratings shall be posted on chemical storage space doors.

Decking and pool basin.

9-30. Interactive Water Play Aquatic Venues.

- A. Cracks shall be repaired when they may be a potential for leakage, present a tripping hazard, a potential cause of lacerations, or impact the ability to properly clean and maintain the interactive water play aquatic venue area.
- B. When cleaning, contaminants shall be removed or washed into the sanitary sewer and shall not be allowed to enter the recirculation system.
- C. If no sanitary sewer drain is available, then debris shall be washed/rinsed to the nearest deck drain or removed from the aquatic venue in a manner that prevents contaminants from entering the recirculation system.

9-31. Rope and Float Lines. Required rope and float lines shall be in place at all times an aquatic venue is available for use or is in use by patrons.

9-32. Aquatic venues with a basin shall have a thermometer located in the basin for monitoring water temperature.

9-33. Glare.

- A. The license holder shall assess glare conditions to determine if the aquatic venue bottom and objects in the pool are clearly visible during operating hours.
- B. If lifeguards are required at any aquatic venue, glare conditions shall be assessed from each lifeguard position to determine if the aquatic venue bottom and objects in the pool are clearly visible to lifeguard staff throughout operating hours.
- C. Windows and lighting equipment shall be adjusted to minimize glare and excessive reflections on the water surface.

9-34. Glass furniture is prohibited on all deck areas, changing rooms, and locker rooms.

9-35. Perimeter decking shall be maintained free of any obstructions.

9-36. Diving boards, slides, and other deck/basin features.

- A. Shall be inspected daily for any damage or loose fasteners or connections.
- B. Any damage shall be repaired immediately, or the feature taken out of service.
- C. Loose fasteners or connections shall be tightened immediately.
- D. Starting platforms shall be prohibited from use by unqualified patrons and shall be made inaccessible through removal, signage, covers or other barriers or deterrents.

Safety equipment/Signage and rules.

9-37. Safety Equipment Required at All Aquatic Facilities

- A. Hard Wired Telephone.
 - 1. Each aquatic facility or each aquatic venue, as necessary, shall have a functional telephone or other communication system or device that is hard wired and capable of directly dialing 911 or functioning as the emergency notification system.
 - 2. The telephone or communication system or device shall be conspicuously provided and accessible to patrons immediately and at all times.
 - 3. A sign shall be present indicating the location of the telephone or emergency communication system or device.
 - 4. A permanent sign providing emergency dialing directions and the aquatic facility address shall be posted and maintained at the emergency telephone, system, or device.
 - 5. A sign shall be conspicuously posted and maintained displaying contact information for emergency personnel and aquatic facility management.
- B. First Aid Equipment.
 - 1. There shall be designated locations for emergency and first aid equipment. A sign (or signs) shall be present that clearly indicates the location of such equipment.
 - 2. First aid supplies shall include, at a minimum:
 - a. A first aid guide,
 - b. Absorbent compress,
 - c. Adhesive bandages,
 - d. Adhesive tape,
 - e. Sterile pads,
 - f. Disposable gloves,
 - g. Scissors,
 - h. Elastic wrap,
 - i. Emergency blanket
 - j. Resuscitation mask with one-way valve, and
 - k. Blood borne pathogen spill kit.
- C. U.S. Coast Guard-approved life jackets that are properly sized and fitted shall be provided free and shall be available at or immediately adjacent to all wave pools.

9-38. Safety Equipment Required at Facilities with Lifeguards.

- A. Lifeguards and lifeguard positions shall be provided with protection from UV radiation exposure.
- B. Backboards sufficient in number to affect a 2-minute response time to the location of any incidents.
 - 1. Backboards shall be constructed of materials that can easily be cleaned and Disinfected.
 - 2. Backboards shall be equipped with a head immobilizer and sufficient straps to immobilize a person to the backboard.
- C. Rescue tubes for each qualified lifeguard conducting patron surveillance:
 - 1. Immediately available for those at a water depth of less than 3 feet; or
 - 2. On their person for those at a water depth of 3 feet or greater.
- D. Qualified lifeguards shall wear attire that readily identifies them as members of the aquatic facility lifeguard staff.

- E. A whistle or other signaling device shall be worn by each qualified lifeguard conducting patron surveillance for communicating to users and/or staff.
- F. All aquatic facilities where qualified lifeguards or other staff can be exposed to UV radiation shall train lifeguards about the use of protective clothing, hats, sun-blocking umbrellas, and sunscreen application and re-application using or exceeding SPF level 15 to protect exposed skin areas.
- G. When glare impacts the ability to see below the water's surface, qualified lifeguards shall wear polarized sunglasses while conducting bather surveillance.
- H. Personal protective devices including a resuscitation mask with one-way valve and non-latex, non-powdered, one-use disposable gloves shall be worn in the form of a hip pack or attached to the rescue tube of all qualified lifeguards on duty.
- I. Aquatic facilities with one qualified lifeguard shall provide and maintain a U.S. Coast Guard-approved aquatic rescue throwing device and a reaching pole as per the specifications of Section 9-19.

9-39. Safety Equipment and Signage Required at Facilities Without Lifeguards.

- A. Aquatic venues whose depth exceeds 2 feet of standing water shall provide and maintain a U.S. Coast Guard-approved aquatic rescue throwing device, with at least a ¼ inch thick rope whose length is 50 feet or 1.5 times the width of the pool, whichever is less.
- B. Rescue throwing devices shall be located in the immediate vicinity to the aquatic venue and shall be accessible to patrons.
- C. Aquatic venues whose depth exceeds 2 feet of standing water shall provide and maintain a reaching pole of 12 feet to 16 feet in length, non-telescopic, light in weight, and with a securely attached Shepherd's Crook with an aperture of at least 18 inches.
 - 1. Reaching poles shall be located in the immediate vicinity to the aquatic venue and shall be accessible to patrons.
 - 2. Reaching poles shall be of non-conductive material.

9-40. The following signage is mandatory at all aquatic facilities:

- A. A sign displaying the operating hours of the aquatic facility and stating that unauthorized use of the aquatic facility outside of those hours is prohibited.
- B. At aquatic venues that do not have lifeguards:
 - 1. CPR posters that are up to date with the latest CPR programs and protocols shall be posted conspicuously.
 - 2. A sign shall be posted outlining the imminent health hazards that mandate aquatic facility or aquatic venue closure and a telephone number to report problems to the owner/operator.
 - 3. A sign stating that a qualified lifeguard is not on duty, and the following rules apply:
 - a. Persons under 14 years of age cannot be in the aquatic venue without direct supervision by a person aged 18 years or older; and
 - b. Youth and childcare groups, training, lifeguard courses, and swimming lessons are not allowed without a qualified lifeguard providing patron surveillance.
- C. Chemical storage spaces shall have all required signage as required in 9-20 Part N.
- D. For waterslides and landing pools, warning signs shall be posted in accordance with manufacturer's recommendations.
- E. All areas of the pool that are less than five feet in depth shall be marked with signs prohibiting diving. Also, the deck shall be marked to indicate that diving is prohibited in

these same areas. These signs and deck markings shall be spaced no farther apart than one every 25 feet.

- F. If diving boards are present, a sign shall be displayed with diving board rules.
- G. A sign that clearly states aquatic venue capacity.
- H. A sign that requires swim diapers for infants or any other incontinent individuals.
- I. A sign that states that showering is mandatory for all individuals before aquatic venue use.
- J. If a spa is present, a sign shall be displayed with spa rules.

9-41. The license holder shall take all necessary steps to enforce any rules posted on mandatory signage in all parts of the aquatic facility.

9-42. Signage and rules shall be posted so that:

- A. They are located in a location so as to be easily viewed by patrons and staff in the locations they are intended to apply to.
- B. They are not obstructed in any way.
- C. All writing is legible and of sufficient size to be read by all patrons and staff.

9-43. The license holder shall ensure that all PPE required for all chemicals on site is present in suitable quantities and sizes and that all used PPE is discarded in an approved manner.

9-44. Emergency exit routes shall be maintained in a well-lit, unobstructed, and accessible state at all times that the aquatic facility is open to the public.

Other equipment requirements.

9-45. Aquatic facilities shall be kept free of items that are unnecessary to the operation or maintenance of the facility such as equipment that is nonfunctional or no longer used.

9-46. Suction cleaners either of the portable type or as part of the permanent piping system are required. Suction cleaners that are run directly off the influent side of the pump are prohibited.

9-47. Provision of Suits, Towels, and Shared Equipment.

- A. All towels or attire provided by the aquatic facility shall be provided to a single patron or employee for use, then washed with a detergent in warm water, rinsed and thoroughly dried at the hottest settings listed on the care label prior to being provided to another patron.
- B. Non-absorbent, easily cleanable receptacles shall be provided for the collection of used towels and attire.
- C. Equipment provided by the aquatic facility that can or does come into contact with patrons' eyes, nose, ears, and/or mouth (including but not limited to snorkels, nose clips, and goggles) shall be cleaned and sanitized between uses, and stored in a manner that prevents the growth of biological organisms.
- D. Other shared equipment (not covered by Part C above) provided by the aquatic facility, including but not limited to fins, kickboards, tubes, lifejackets, and noodles, shall be kept clean and stored in a manner to prevent the growth of biological organisms.
- E. Used equipment awaiting cleaning and/or sanitization shall be stored separately from cleaned and sanitized equipment.
- F. Non-absorbent, easily cleanable receptacles shall be provided for the collection of used equipment.

Electrical safety.

- 9-48. GFCI Devices. Where receptacles or any other part of the electrical system is required to be protected by GFCI devices, the GFCI devices shall be tested and the results, date of testing, and name of the person doing the test recorded in a log:
- A. At installation;
 - B. Prior to the first day of operations; and
 - C. As per the manufacturer's recommendations or monthly, whichever requirement is more frequent.
- 9-49. Grounding.
- A. Any aquatic venue with damaged grounding connectors or grounding electrodes associated with recirculation equipment, disinfection equipment, or underwater lighting systems shall be taken out of service until repairs are completed and such repairs are inspected and approved by the authority having jurisdiction.
 - B. Grounding compliance shall be preserved at all times aquatic venues are available for use by patrons. If at any time grounding compliance is not maintained, or if there is any chance of grounding compliance not being maintained due to damage to or disconnection of grounding connectors or grounding electrodes, patrons may not have access to any aquatic venue; if necessary to protect public health and safety, access to the entire aquatic facility shall be restricted.
 - C. Any work affecting grounding compliance shall only be performed by those who are licensed to perform such work, or to those determined by the authority having jurisdiction to be qualified to perform such work. Such work shall also be inspected and approved by the authority having jurisdiction prior to patrons having access to the aquatic venue or aquatic facility.
- 9-50. Bonding.
- A. Maintenance or repair of all metallic equipment, electrical circuits or devices, or reinforced concrete structures shall preserve bonding compliance with the NEC and all applicable local, state, territorial, federal, and tribal laws.
 - B. No bonding conductors may be disconnected unless the aquatic venue is not accessible by patrons.
 - C. Removable covers protecting bonding conductors shall be in place at all times except when the conductors are being inspected, repaired, or replaced. During such times, the aquatic shall be taken out of service.
 - D. Bonding conductors shall be inspected visually every 6 months or whenever disrupted or impacted by site construction or other event.
 - E. Bonding conductors shall not be extensively corroded.
 - F. Continuity of the bonding system shall be inspected by the authority having jurisdiction following installation and after any major construction work around the facility.
- 9-51. Extension Cords.
- A. Extension cords shall only be used for temporary purposes during maintenance, remodeling, or repair of equipment.
 - B. Extension cords and temporary power connectors shall not be used as a substitute for permanent wiring.
 - C. All parts of an extension cord must be secured a minimum of 6 feet measured along the shortest path from any body of water during any time an aquatic facility is available to patrons.

- D. The circuit supplying current to an extension cord shall be protected by GFCI protection if the cord is used within 6 feet of water or a source of water.
- E. The use of extension cords shall comply with 29 CFR 1910.304.
- F. Portable line-powered devices, such as radios or drills, shall not be used within 6 feet of the nearest edge of water or a source of water unless connected to a GFCI protected circuit.

Trash/Recyclables.

9-52. Trash and waste.

- A. Solid waste/trash disposal shall be at a frequency such that:
 - 1. No waste or trash accumulates on site that is not contained in an approved trash receptacle, and
 - 2. Waste or trash kept on site in accordance with Part 1 above is not allowed to develop odors and is inaccessible to all animals, and
 - 3. Is removed from the premises of the aquatic facility by an approved waste/trash hauler at least once per 7-day period
- B. Trash/waste receptacles shall be lined and shall be covered so as to make trash and waste inaccessible to insects and rodents.
- C. Trash receptacles shall be changed at least daily and more often if necessary to prevent accumulation of refuse and to maintain a clean and sanitary environment.

Section 10: Special Venues

10-1. Flotation Tank Design and Construction.

- A. Flotation tanks shall be constructed in compliance with MAHC 4.1.10.1 through 4.1.10.11 and MAHC 7.1.
- B. Flotation tanks shall be operated and maintained to keep in compliance with the standards detailed in Part A above.

10-2. Flotation Tank Operations. A flotation tank shall operate in compliance with all requirements in this code deemed to be applicable by the Department. In addition, a flotation tank shall comply with the requirements of this section.

- A. Prior to being placed in service, a flotation tank shall obtain a license as an aquatic venue as detailed in Section 3.
- B. A flotation tank shall be inspected as an aquatic venue as per Section 4.
- C. A written comprehensive preventative maintenance plan for each flotation tank shall be kept and shall be available for review at the flotation tank facility.
 - 1. This plan shall include details and frequency of the license holder's planned routine facility inspection, maintenance and replacement of recirculation and water treatment components.
 - 2. All manufacturer's recommended maintenance and replacement intervals for any water, chemicals or equipment shall be included in the maintenance plan. Timeframes and intervals in the maintenance plan shall be at least as often as those recommended by the manufacturer and may not be longer.
 - 3. Failure to follow the routine maintenance plan shall result in suspension of the license for the flotation tank.
 - 4. The original plans and specifications shall be included in the maintenance plan.

5. A comprehensive inventory of all mechanical equipment associated with each flotation tank shall be part of the maintenance plan. The inventory shall include at a minimum:
 - a. Equipment name and model number,
 - b. Operation manuals, or if no manual is available, a written document that outlines the standard operating procedures for maintaining and operating the piece of equipment,
 - c. Manufacturer and contact information,
 - d. Local vendor/supplier and technical representative, if applicable, and
 - e. Replacement or service dates and details.
- D. Facility operations manual.
 1. Each flotation tank facility shall have an operations manual in both printed and electronic formats. The manual shall be present at the facility and available for review at all times.
 2. The manual shall include, at a minimum:
 - a. Flotation tank description and location(s),
 - b. List of chemicals and system information,
 - c. Fecal/vomit/blood contamination plans,
 - d. Preventive maintenance plan, and
 - e. Any other standard operation and maintenance policies and instructions or applicable information for each flotation tank at the facility.
- E. Flotation tank facilities shall keep records pertaining to the operation, maintenance, and management of the flotation tank facility on a minimum schedule as required in this section and by any other applicable state, local, territorial, federal or tribal law.
 1. Such records shall be kept a minimum of three years, and
 2. Shall be available upon request by the Department.
- F. The qualified operator shall ensure that safety and preventive maintenance inspections are done at the flotation tank facility during periods when the flotation tank facility is open and that the results are recorded in a log or form as required in this section.
- G. Daily inspection items. The qualified operator shall ensure that a daily flotation tank facility preventive maintenance inspection is done before opening and that it shall include:
 1. Drain covers, vacuum fitting covers, skimmer equalizer covers, and any other suction outlet covers are in place, secure and undamaged.
 2. Skimmer baskets, weirs, lids, flow adjusters, and suction outlets are free of any blockage.
 3. Inlet and return covers and any other fittings are in place, secure and undamaged.
 4. Safety warning signs and any other signage in in place and legible.
 5. Entrapment prevention systems are operational.
 6. Recirculation, disinfection systems, controllers, and probes are operating as required,
 7. Underwater lights and other lighting systems are functional and intact with no exposed wires or water in any lights,
 8. Slime and biofilm have been removed from all surfaces,
 9. Doors to nonpublic areas are locked,
 10. Electrical devices are in good working condition and meet all requirements, and
 11. Assessing flotation tank solution clarity such that the bottom and objects in the flotation tank are clearly visible.

- H. GFCI devices shall be tested monthly and bonding conductors shall be inspected every 6 months.
- I. Air handling systems shall be maintained and operated by the license holder to protect the health and safety of patrons and employees.
- J. Water introduced into the flotation tank shall only be supplied through an air gap or by another method that will prevent backflow or back-siphonage.
- K. Flotation tank wastewater, flotation tank solution, backwash water and cartridge cleaning water shall be disposed of in accordance with all applicable law and may only be disposed of in an approved sewage disposal system.
- L. Wastewater, backwash water and cartridge cleaning water may not be returned to the flotation tank or into the flotation tank circulation or treatment system.
- M. Any filter backwash lines, deck drains, or other drain line connected to any part of a float tank may only discharge to waste through an approved air gap.
- N. Discharge water and flotation tank solution shall not create any standing water/solution, a nuisance, offensive odors, stagnant wet areas, or an environment for the breeding of insects.
- O. Only USP grade magnesium sulfate shall be used in the flotation tank solution.

10-3. Disinfection.

- A. Ozone and UV systems shall be operated and maintained to achieve the required design performance for a 3-log inactivation as specified in MAHC 7.1.
- B. Ozone and UV systems shall be operated and maintained in accordance with manufacturer's instructions.
- C. UV Sensors.
 - 1. When UV is used, the UV sensors shall be calibrated at a frequency in accordance with manufacturer recommendations.
 - 2. Records of calibration shall be maintained by the facility and available for review by the Department.

10-4. Showers and Hygiene Facilities.

- A. Signs shall be provided instructing patrons to shower before entering the flotation tank.
- B. Hygiene facility fixtures, showers, dressing area fixtures, and furniture shall be cleaned and sanitized daily, and more often if necessary to provide a clean and sanitary environment.

10-5. Cleaning.

- A. Flotation tank interior surfaces at the waterline shall be scrubbed or wiped down on a daily basis to prevent build-up of residue, slime, or a biofilm layer.
- B. Flotation tank interior surfaces shall be scrubbed or wiped down on a weekly basis to prevent build-up of residue, slime, or biofilm layers.
- C. Flotation tanks shall be drained, and all interior surfaces shall be scrubbed or wiped down prior to refilling at a frequency necessary to prevent build-up of residue, slime, or biofilm layers.

10-6. Fecal/Vomit/Blood Contamination Response.

- A. In the event of fecal or vomit contamination in a flotation tank, the qualified operator shall immediately take the flotation tank out of service until remediation procedures have been completed.
- B. Contaminating material shall be removed as per Section 7-3.

- C. Formed stools or blood contamination: the filtration and disinfection systems shall be operated for the minimum volumetric turnovers specified in Section 10-3.
- D. Diarrheal-stool or vomit contamination: the flotation tank water shall be completely drained, and the contaminated flotation tank surfaces cleaned and disinfected prior to refilling.
- E. A log shall be maintained to document each and any occurrence of any of the above. The log shall include:
 - 1. Person conducting response,
 - 2. Qualified operator or responsible supervisor on duty,
 - 3. Date and time of incident, response, and flotation tank closure,
 - 4. Specific area contaminated,
 - 5. Description of incident including type of contamination and remediation procedures used, and
 - 6. Date and time of reopening.

10-7. Illness and Injury Incident Reports.

- A. The qualified operator shall ensure that a record is made of all injuries and illness incidents at the flotation tank facility which:
 - 1. Result in death,
 - 2. Requires resuscitation, CPR, oxygen, or AED use,
 - 3. Requires transportation of the patron to a medical facility, or
 - 4. Is a patron illness or disease outbreak associated with flotation tank solution quality.
- B. Report information shall include, at a minimum:
 - 1. Date, time, and location of incident,
 - 2. Incident information including type of illness or injury and cause or mechanism,
 - 3. Names, addresses, and contact information for those involved or witnesses,
 - 4. Actions taken,
 - 5. Equipment used, and
 - 6. Outcome of incident.
- C. The qualified operator shall notify the Department within 24 hours of the occurrence of any incident recorded under this section.

Section 11: Compliance and Enforcement

- 11-1. The Department shall clearly state and reference within the code the legally sound basis for compliance and enforcement action, the responsibilities of the parties, sanctions for non-compliance and due process.
- 11-2. A notice issued in accordance with this code shall be considered to be properly served if it is served by one of the following methods:
 - A. The notice is personally served by the Department, a law enforcement officer, or a person authorized to serve a civil process to the license holder or their designate or to a person operating a facility without a valid license;
 - B. The notice is sent by the Department to the last known address of the license holder or of the person operating a facility without a valid license, by registered or certified mail or by other public means so that a written acknowledgement of receipt may be required; or
 - C. The notice is provided by the Department in accordance with another manner of service authorized by law.

- 11-3. The Department may seek an administrative or judicial remedy to achieve compliance with the provisions of this Code if the license holder, or any other person operating a facility:
- A. Fails to have a valid license to operate a facility as specified in Section 2-1;
 - B. Violates any term or condition of a license as specified under Section 7-1;
 - C. Allows serious or repeated code violations to remain uncorrected beyond time frames for correction approved, directed, or ordered by the Department under Section 4-13;
 - D. Fails to comply with a summary suspension order issued by the Department as specified in Section 11-4.
- 11-4. Summary license suspension.
- A. The Department may summarily suspend a license to operate a facility if it determines through inspection, or examination of employees, food, records, or other means as specified in this code that an imminent health hazard exists.
 - B. The Department may summarily suspend a license by providing written notice as specified in Part C of the summary suspension to the license holder or their designate without prior warning, notice of hearing, or a hearing.
 - C. A summary suspension notice shall state:
 1. That the facility license is immediately suspended and that all operations shall immediately cease;
 2. The reasons for summary suspension with reference to the provisions of this code that are in violation;
 3. The name and address of the Department representative to whom a written request for reinspection may be made and who may certify that reasons for the suspension are eliminated; and
 4. That the license holder may request an appeal hearing by submitting a timely request.
 - D. After receiving a written request from the license holder stating that the conditions cited in the summary suspension order no longer exist, the Department shall conduct a reinspection of the facility for which the license was summarily suspended within 5 business days, which means 5 days during which the Department's office is open to the public.
 - E. Term of suspension, reinstatement of license.
 1. A summary suspension shall remain in effect until the conditions cited in the notice of suspension no longer exist and their elimination has been confirmed by the Department through reinspection and other means as appropriate.
 2. The suspended license shall be reinstated immediately if the Department determines that the public health hazard or nuisance no longer exists. A notice of reinstatement shall be provided to the license holder or their designate.
- 11-5. Hearings administration.
- A. Response to notice of hearing or request for hearing, basis, and time frame.
 1. A person who receives a notice of hearing for an administrative remedy as specified herein and elects to respond to the notice shall file a response to notice as specified herein within 7 calendar days after service.
 2. A license applicant may request a hearing regarding the disposition of an application for a new or revised license if the Department does not issue or deny the license within the time frame specified in law.
 3. A license holder may request a hearing to address concerns about the Department's denial of application for a license or request for a variance, or

compliance actions, except that a hearing request does not stay the imposition of a summary suspension as specified herein.

4. A person desiring a hearing in response to a denial of an application for a license or an adverse administrative determination shall submit a hearing request to the Department within 10 calendar days of the date of the denial, inspection, or compliance action, unless the Department specifies in certain situations that the request shall be submitted within a shorter period of time.
- B. A response to a hearing notice or a request for hearing as specified herein shall be in written form and shall contain the following:
1. If a response to notice of hearing,
 - a. An admission or denial of each allegation of fact;
 - b. A statement as to whether the respondent waives the right to a hearing; and may also contain
 - c. A statement of defense, mitigation, or explanation concerning any allegation of fact; and
 - d. A request to the Department for a settlement of the proceeding by consent agreement, if the Department will provide this opportunity.
 2. If a request for a hearing,
 - a. A statement of the issue of fact as specified herein for which the hearing is requested; and
 - b. A statement of defense, mitigation, denial, or explanation concerning each allegation of fact.
 3. If either a response to notice of hearing or a request for a hearing,
 - a. A statement indicating whether the presence of witnesses for the Department is required; and
 - b. The name and address of the respondent's or requester's legal counsel, if any.

11-6. Criminal proceedings.

- A. Institution of proceedings.
1. Proceedings to enforce this code may be instituted by the Department according to law by filing a misdemeanor complaint affidavit and request for a warrant of arrest with the court of competent jurisdiction or by referring the complaint to a grand jury for indictment, as appropriate.
 2. The Department may designate a representative to issue summons or citations or sign warrants on behalf of the agency.
- B. The Department may, according to law, petition a court of competent jurisdiction for temporary or permanent injunctive relief to achieve compliance with the provisions of this code or its orders.
- C. A person who violates a provision of this code may be charged with a Class B misdemeanor under the North Dakota Century Code (NDCC).

11-7. A person may be charged with a misdemeanor under the NDCC if they:

- A. Violate this ordinance.
- B. Permit a violation to exist on the premises under their control.
- C. Fail to take action to abate the existence of the violation(s) of this code within a specified time period when notified to do so by the Department.

- 11-8. When an imminent health hazard is found and remains uncorrected, the aquatic venue shall be placarded to prohibit use until the hazard is corrected in order to protect the public health or safety of bathers.
- A. When a placard is used, it shall be conspicuously posted at every entrance to the aquatic venue.
 - B. When placed by the Department, the placard shall state that it is placed by order of the Department.
 - C. The placard shall indicate that concealment, mutilation, alteration, or removal by any person without the permission of the Department shall constitute a violation of this code.
 - D. Once the imminent health hazard has been corrected, the license holder may contact the Department and request a follow-up inspection to verify the hazard has been corrected.
 - E. If the hazard has been corrected to the satisfaction of the Department, they may give permission for the placard to be removed and for the aquatic venue to be placed back in service.
- 11-9. If a person with an illness that is transmissible through water is knowingly allowed to perform any activities that could potentially result in the spread of illness, and an investigation determines that a recreational water illness was spread by such activity, then the license for that aquatic facility will be suspended or revoked.

APPENDIX A

LANGELIER SATURATION INDEX

TEMP (F)	FACTOR	CA HARDNESS	FACTOR	ALKALINITY	FACTOR
32	.1	5 PPM	.3	5 PPM	.7
37	.1	25 PPM	1.0	25 PPM	1.4
46	.2	50 PPM	1.3	50 PPM	1.7
53	.3	75 PPM	1.5	75 PPM	1.9
60	.4	100 PPM	1.6	100 PPM	2.0
66	.5	125 PPM	1.7	125 PPM	2.1
76	.6	150 PPM	1.8	150 PPM	2.2
84	.7	200 PPM	1.9	200 PPM	2.3
94	.8	250 PPM	2.0	250 PPM	2.4
105	.9	300 PPM	2.1	300 PPM	2.5
128	1.0	400 PPM	2.2	400 PPM	2.6
		800 PPM	2.5	800 PPM	2.9
		1000 PPM	2.6	1000 PPM	3.0

$\text{pH} + \text{temp F factor} + \text{Ca hardness factor} + \text{alkalinity factor} - 12.1 = \text{saturation index}$

1. Find the temp of your pool under the column above. The factor number from the chart is the number you will use in the formula. If your temp is between two of the numbers on the chart, use the factor for the temp that your temp is closest to.
2. Find the Ca hardness in ppm of your pool on the chart above. The factor number from the chart is the number you will use in the formula. If your Ca hardness is between two values on the chart, use the factor for the closest value.
3. Find the total alkalinity of your pool on the chart above. The factor number from the chart is the number that you will use in the formula. If your total alkalinity is between two values on the chart, use the factor for the closest value.
4. If the saturation index number you get from the formula above is between + .5 and - .5 then your pool has balanced water.
5. If the saturation index number you get from the formula above is greater than + .5, then your pool water will likely cause scale formation.
6. If the saturation index number you get from the formula above is less than - .5, then your pool water is corrosive.