# Cheat Sheet for Calculating Scores for the Aquatic Facility Inspection Form Based on CDC's 2024 Model Aquatic Health Code

## **Numeric Inspection Score Calculation Formula**

total compliance points scored

= numeric inspection score (%)

(total compliance points scored + total non-compliance points scored)

#### Use this cheat sheet to calculate aquatic facility inspection scores.

- 1. Add up all points of inspected items found to be in compliance to calculate total compliance points.
- 2. Add up all points of inspected items found <u>not</u> to be in compliance to calculate total non-compliance points.
- 3. Do not add points of inspected items that are <u>not applicable</u> (N/A).
- 4. Divide total compliance points by the sum of total compliance points and total non-compliance points.

**Grading System:** A = 95-100%; B = 85-94%; C = 75-84%; F = 74% or less or critical item

### Look at aquatic venue traits to help you understand the risks.

Risk Category	Description	Example Frequency of Inspections #/Yr
1	<ul> <li>Operates only in the summer and has had multiple excellent inspection reports in a row</li> <li>Would otherwise be grouped in Category 2 but has documentation of active operational control of illness and injury risk factors</li> </ul>	1
2	<ul> <li>Has limited history of non-compliance with provisions related to illness/injury risk factors or critical items</li> <li>Would otherwise be grouped in Category 3 but has documentation of active operational control of illness and injury risk factors</li> <li>Operates only in the summer or year-round</li> </ul>	2
3	<ul> <li>Serves populations at increased risk of illness such as diaper-aged children (children &lt;5 years old)</li> <li>Serves large numbers of people</li> <li>Has a history of waterborne illness, injuries, or complaints</li> <li>Has a history of non-compliance with provisions related to illness/injury risk factors or critical items</li> <li>Operates year round</li> <li>Are a type of venue shown in national studies to have more violations, such as wading pools (kiddie pools), splash pads, and therapy pools</li> </ul>	3



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- 1. **A** Enclosure (Fencing/Walls/Doors): Failure to provide and maintain an enclosure or barrier to inhibit unauthorized access to the aquatic facility or aquatic venue when required.
- 2. A Gates/Doors: Failure of gates and doors that are self-closing and self-latching. Failure of exit doors or gates that swing away from the pool enclosure (except where emergency egress codes require them to swing into the pool enclosure).
- 3. Protected overhead electrical wires/GFCl electrical receptacles: Unprotected overhead electrical wires within 20 feet horizontally of the aquatic venue. Non-GFCl protected electrical receptacles within 20 feet of the inside wall of the aquatic venue. Failure to maintain or repair electrical circuits or devices to preserve grounding compliance with the NEC.
- 4. Grab rails/ladders & shell/deck: Failure to have grab rails and ladders anchored securely; shell and deck are in good repair.
- 5. Float/safety line: Failure to have float line clearly present.
- 6. A Markers/stair stripes: Failure to have "depth" & "no diving" markers present; stair stripes not present.
- 7. Skimmers: Failure to have weirs and skimmer baskets installed; clean and operating; skimmer covers in good repair.
- 8. Recirculation inlets: Ineffective distribution of treated water by either a continuous perimeter overflows system with integral inlets or by means of directionally adjustable inlets adequate in design, number, location, and working order.
- 9. A Broken, unsecured, or missing main drain gate or any unprotected submerged suction outlet in the aquatic venue.
- 10. **A** Water is clear, main drain visible: Aquatic venue bottom not clearly visible.
- 11. Starting blocks: Failure to have starting blocks removed, covered, or access blocked when not being supervised by qualified official.
- 12. Deck free from obstruction: Failure to have a minimum of 4 feet of clearance from aquatic venue edge to fencing or other obstruction to allow for qualified lifeguard transit, roaming, or change of positioning to maximize viewing of the zone of patron surveillance as well as execution of bather extrication.
- 13. Emergency communication equipment: As necessary, a functional telephone or other communication system or device that is hard wired and capable of directly dialing 911 or function as the emergency notification system. The telephone or communication system or device not conspicuously provided and accessible to aquatic venue users such that it can be reached immediately.
- 14. First Aid: Failure to have first aid kit available and accessible.
- 15. A Safety Equipment: Absence of all safety equipment required at aquatic facilities with or without lifeguards; Includes spinal injury board, throw device, rescue tube (with presence of lifeguard), and Shepherd's crook.
- 16. A Supervision: Failure to provide adequate lifeguard supervision of the aquatic facility.
- 17. Signs: Failure to have safety warning signs, chemical, bather loading, spa and other signage are in place and in good repair.
- 18. Temperature: water temperature of any venue is greater than 104°F.
- 19. Test kit: Failure to have water quality testing kits certified to NSF/ANSI 50 by an ANSI-accredited certification organization.
- 20. A Failure to maintain proper disinfectant level.

Free available chlorine (FAC) must be  $\geq$  1.0 ppm for venues not using cyanuric acid; FAC  $\geq$  2.0 ppm for venues using cyanuric acid; FAC  $\geq$  3.0 ppm for spas; FAC shall not exceed 10.0 ppm at any time the aquatic venue is open to bathers.

Bromine  $\geq 3.0$  ppm for pools ( $\geq 4.0$  for spas); failure to provide the minimum disinfectant residual levels listed results in immediate closure.

- 21. Proper pH level: Failure to maintain between 7.0 and 7.8 to ensure bather comfort and efficacy of chlorine.
  - ⚠ Closure: pH less than 6.5 or pH greater than 8.0
- 22. Combined chlorine: Failure to have combined chlorine levels < 0.4 ppm
- 23. Cyanuric acid operating level: Failure to have cyanuric acid ≤ 90 ppm.
  - ⚠ Closure: CYA:DPD-FC ratio exceeds 45:1
  - A Closure: Cyanuric acid concentration exceeds maximum level of 300 ppm
- 24. Automated feeder: Not in good repair and inoperable. FAC (or TB) and pH shall be tested prior to opening and every four hours at all aguatic venues using an automated disinfectant feed system.
- 25. Automated controller: Failure of having an operational controller capable of measuring the disinfectant residual (free available chlorine or bromine) or surrogate such as ORP used to maintain the disinfectant residual in aquatic venues.
  - ⚠ Closure: Failure to provide operating interlock controls and flow meters/flow switches/pressure switches
- 26. Piping and valves: Failure to have all piping marked with directional arrows as necessary to determine flow direction; Failure to have all valves clearly identified with a brass tag, plastic laminate tags or permanently affixed alternate.
- 27. Flow meter: Not present and/or not maintained in proper working order.
- 28. A Pump: Failure to have all components of the recirculation system kept in operation (24 hours per day).
- 29. A Filter: Failure to have all components of the filtration system kept in operation (24 hours per day).
- 30. Pump strainer: Failure to have strainer baskets cleaned as necessary to maintain proper skimming.
- 31. Filter gauges: Failure of filter gauges to work.
- 32. UV and/or ozone system: Where required, failure to have secondary UV or ozone systems 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 for a 3-log inactivation; Failure to have UV and/or ozone system operated and maintained according to the manufacturer's instructions to maintain the required design performance.
- 33. Chemicals: Failure to store pool chemicals, acids, fertilizers, salt, de-icing chemicals, oxidizing cleaning materials, other corrosive or oxidizing chemicals, and pesticides outdoors in a well-ventilated protective enclosure; Failure to have labeling of containers, or the Material Safety Data Sheet of chemicals indicates incompatibility of storage with other chemicals present, then other chemical storage space(s) shall be provided; Failure to secure the chemical storage and pump room to prevent unauthorized access.
  - ▲ Closure: Failure to prevent unauthorized access to the chemical storage spaces.
- 34. Personal Protective Equipment (PPE): Failure to have PPE available as indicated on the Material Safety Data Sheet. At facilities using gaseous chlorine, failure to have personal protective equipment, consisting of at least a gas mask approved by NIOSH for use with chlorine atmospheres, stored directly outside one entrance to an indoor gaseous-chlorination space.
- 35. Diaper changing stations: Failure to have at least one diaper-changing station in each male and female hygiene facility or make available a unisex diaper-changing station; an adjacent sink or portable hand-wash station shall be available; A covered, hands-free, plastic-lined trash receptacle or diaper pail shall be located directly adjacent to the diaper-changing unit; An EPA-registered sanitizer shall be provided for maintaining a clean and sanitized diaper-changing unit surface before and after use.
- 36. Equipment: Failure of used and un-sanitized shared equipment to be kept separate from cleaned and sanitized shared equipment.
- 37. Toilets: Failure to have total toilet or urinal counts in accordance with applicable state and local codes or as modified herein.
- 38. Rinse showers: Failure to have water used for rinse showers at ambient temperature; Floors of rinse showers shall be sloped to drain wastewater away from the aquatic venue and meet local applicable codes.

- 39. Cleansing showers: Water temperature above 120°F; Failure to have cleansing showers supplied with soap and a soap dispenser adjacent to the shower.
- 40. Operator training certificates: Failure to have originals or copies of such certificate or documentation available on site for inspection by the AHJ for each qualified operator employed at or contracted by the site.
- 41. Lifeguard training certificates: Failure to have originals or copies of all required qualified lifeguard, lifeguard supervisor safety personnel training, or qualified operator certificates maintained at the aquatic facility and made available to AHJ, staff, and pool patrons upon request.
- 42. Inspection report posted: Failure to have inspection report posted in plain view.
- 43. Operator inspection items 1: Daily checklist incomplete.
- 44. Operator inspection items 2: Failure of the qualified operator or responsible supervisor to appropriately respond to daily safety and preventive maintenance inspections before the aquatic facility opens during seasons or periods when the aquatic facility is open and record the results in a log or form maintained at the aquatic facility.
- 45. Chemical records 1: Checklist incomplete.
- 46. Chemical records 2: Failure to have a chemical inventory log maintained on site to provide a list of chemicals received, used, and approximate quantities.
- 47. Emergency Action Plan: Failure of emergency action plans and operating procedures being available and to include, but not be limited to:
  - 1) Outline types of emergencies and imminent health hazards, as per MAHC Section 6.6.4;
  - 2) Outline the methods of communication between responders, emergency services, and patrons;
  - 3) Identify each anticipated responder;
  - 4) Outline the tasks of each responder;
  - 5) Identify required equipment for each task; and
  - 6) Emergency closure requirements.
- 49. A Recirculated Floatation Tank solution passes through the filtration and disinfection systems before being returned to the Floatation Tank. Floatation tank filtration and disinfection systems are operated for one volumetric turnover before first use during the day, a minimum of three volumetric turnovers between users, and four volumetric turnovers after the last patron at the end of the day. Where floatation tank systems with external holding reservoirs are used to hold the floatation tank solution between patron use, all of the floatation tank solution must pass through the filtration and disinfection systems before being returned to the floatation tank.
- 50. Floatation Tank interior surfaces at the waterline are scrubbed down or wiped down on a daily basis to prevent build-up of slime and biofilm layers. Floatation tanks are drained and all interior surfaces scrubbed or wiped down prior to refilling at a frequency necessary to prevent build-up of slime and biofilm.
- 51. A Substantial unauthorized alterations/equipment replacement: The alteration, modification, or renovation of an aquatic venue where the total cost of the work exceeds 50% of the replacement cost of the aquatic venue (for outdoor aquatic facilities) or indoor aquatic facility (for indoor aquatic facilities).

- 52. Other: Included, but not limited to
  - Approved water supply source: Use of an unapproved or contaminated water supply source for potable water use;
  - A Plumbing cross-connections: Plumbing cross-connections between the drinking water supply and aquatic venue water or between sewerage system and the aquatic venue filter backwash facilities;
  - Inadequate pH level: pH level less than 6.5 or greater than 8.0. Below 6.5 (dental enamel removed) or above 8.0 (chlorine less efficient);
  - Underwater lighting: Underwater lights shall be operational and maintained as designed;
  - Emergency light source: Failure to maintain an emergency lighting source;
  - A Glass objects: Glass or sharp objects in aquatic venue or on deck area;
  - Chemicals: Use of unapproved chemicals or application of chemicals by unapproved methods;
  - A Overcrowding: Overcrowding of the aquatic venue that results in poor supervision of bathers:
  - Floatation Tanks: Air handling and ventilation systems in floatation tank room is maintained and in working order, and ventilation serving the floatation tank is provided when necessary to ensure acceptable air quality for human health within the floatation tank;
  - A Floatation Tanks: Failure to maintain NEC requirements for floatation tank electrical systems and wiring;
  - Additional items 1: Any other item determined to be a public health hazard by the AHJ;
  - Additional items 2: Any item that is a local / state requirement that is not yet outlined in the MAHC.

## **Definitions**

**Critical violation**— an imminent health hazard requiring immediate correction or closure.

**Repeat violation**— a violation of the same code provision as documented in the previous routine and/or follow-up inspection. A repeat violation constitutes the initial point deduction as specified on the MAHC inspection form, plus a double point deduction for one or more repeat violation(s) from the overall score (maximum 100 points).

**Compliance Columns**— the aquatic venue (indoor or outdoor) was found to be in compliance for a particular violation. The column "Out" means that the aquatic venue (indoor or outdoor) was found to be out of compliance for a particular violation.