

PLAN REVIEW CHECKLIST FOR PUBLIC SWIMMING POOLS

(Revised November 2021)

The following items should be considered as part of the initial plan review for public swimming pools:

*****BEFORE ANY REVIEW OF THE PLAN CAN BE DONE,
THE RDP SEAL MUST BE INSPECTED*****

- 1.) The seal may be applied by stamp or electronically, however the signature must be individually applied to each page and cannot be applied as a facsimile.
- 2.) Original paper plans with an original ink signature are acceptable.
- 3.) Electronic copies must have signatures applied individually to the original plan pages. If the plans are submitted electronically the RDP must be contacted and verbally confirm they prepared and sealed the plans.
- 4.) Additional FAQs are answered here: <https://www.ncbels.org/wp-content/uploads/2019/03/sealbrochure.pdf>
- 5.) Do not provide any written comments until this step has been completed. Plans can be disapproved based on .2509(a) if necessary to meet the 30-day response requirement.

A. CALCULATIONS

- 1) Complete *SWIMMING POOL PLAN REVIEW CALCULATIONS, COMPONENTS AND PIPING (April 2021)* form

B. DRAIN SAFETY DATA SHEET

- 1) Complete *Pool Drain Safety (VGB) Compliance Data* form (July 2019)
- 2) Documentation provided for the maximum possible pump flow rate for each pump suction system. (This shall be the maximum pump flow shown on the manufacturer's pump performance curve except where flow reductions are justified with total dynamic head measurements or calculations): Rule .2539 (c)(1)
- 3) Documentation that cover covers/grates are installed in compliance with the standard and manufacturer's instructions on a single or double-drain pump suction system rated to meet or exceed the maximum pump system flow: Rule .2539 (c)(2)
- 4) Documentation provided that drain sumps meet the dimensional requirements specified in the cover/grate manufacturer's installation instructions: Rule .2539 (c)(3)

C. POOL AREA SITE PLAN:

- 1) Adequate water supply available: Rule .2512 (a)
- 2) Adequate sewage disposal facilities available: Rule .2513 (a)
- 3) Perimeter fence and gates meet Rule .2528 (Request fence detail drawing if not available.)
- 4) Clear walking space around each pool meets deck area requirements: Rule .2522
- 5) Deck materials impervious, slip resistant: Rule .2522 (g)
- 6) Deck sloped to drain: Rule .2522 (f)
- 7) Deck lighting meets illumination requirements: Rule .2524 (House Bill 56, Oct 4 2017 eliminates (e).
- 8) Hose bibs located within 100' of deck per .2522(h), 50' of dressing rooms per .2526(d), 50' of equipment room per .2533(g).

- 9) Decorative features on pool decks must meet .2515(g)(1) through (6)
- 10) ADA equipment shown on plans: Rule .2522(j)
- 11) Equipment room meets construction, ventilation and space requirements: Rule .2533
- 12) Chemical storage room provided meets construction, ventilation and space requirements: Rule .2534
- 13) Safety equipment specified and telephone provided with signs: Rule .2530 (a), (b) and (f)
- 14) Warning signs provided with exact wording and proper sized lettering: Rule .2530 (c), (d), (e) and (f)
- 15) Mechanical ventilation provided for indoor pools: Rule .2524 (f)
- 16) Bathhouse or restrooms to be located and constructed according to Rule .2526
- 17) Sign at pool enclosure directing all pool users to “shower before entering the pool” per .2526(a)

D. POOL SHELL:

- 1) Approved materials: Rule .2514 (a) and (b)
- 2) Pool finish, bottom and sides, shall be of white or light colored material: Rule .2514 (c)
- 3) Corners rounded (coved or radiused) at intersection of floors and walls: Rule .2516 (a)
- 4) Slip resistant surfaces where required: .2514 (d)
- 5) Shallow end depth meets Rule .2515 (d) and (e)
- 6) Shallow area slope meets Rule .2516 (c) and deep area slope meets Rule .2516 (d)
- 7) Vertical walls of pools not exceeding 11° from plumb: Rule .2516 (a)
- 8) No underwater ledges: Rule .2516 (b)
- 9) Underwater seats, sun shelves or benches meet Rule .2516 (b)
- 10) Diving area dimensions meet Rule .2517 (a) and (c)
- 11) Water fountain feature in pool, if shown meets .2516 (f) (1)-(5)
- 12) Stairs, ladders and handrails provided and meet Rule .2521
- 13) Decks continuous with the top of the pool wall or gutter, <9” above operating water level per .2522(k).

E. APPURTENANCES:

- 1) Fill spout properly located: Rule .2512 (c)
- 2) Floating safety ropes and bottom markings provided where required: Rule .2523 (e) – (at breakpoint of slope)
- 3) Recessed anchors for safety ropes: Rule .2515 (f)
- 4) Contrasting color bands provided on stair treads and seats: Rules .2521 (b) (4) and .2516 (b)
- 5) Diving equipment meets Rule .2517
- 6) Hydrostatic relief valve provided: Rule .2515 (b)
- 7) Skimmers NSF designed and constructed in accordance with Section 8 of NSF Standard 50: Rule .2518 (k) (3)
- 8) Skimmers protected from air entrainment: Rule .2518 (l)
- 9) Underwater lights, if provided, meet illumination requirements in Rule .2524 (d)
- 10) Depth markings and “No Diving” markers provided and properly located: Rule .2523
- 11) Pool slides meet Rule .2527

- 12) Where provided, integral vacuum ports shall be located on the pool wall at least 6 inches and no greater than 18 inches below the water level, provided with self-closing cap designed to be opened with a tool: Rule .2518(f)
- 13) Water falls located on decks shall have no handholds or foothold to a height of 4 feet per .2543(c).

F. POOL PIPING

- 1) If fresh water is introduced into the swimming pool, either directly or by the circulation system, back-flow prevention required per .2512 (b).
- 2) Skimmer equalizer lines prohibited per .2518(j)(3) APSP-7.
- 3) Valves provided to control flow from drains, surface skimmers or surface overflow systems, and vacuum cleaning system: Rule .2518 (c) and (f)
- 4) Vacuum cleaning system with integral ports or portable vacuum system provided: Rule .2518 (f) *Skimmer vacuums may be used in pools with two or fewer skimmers . . .*
- 5) Drainage from pool overflow, deck drains and filter backwash discharged through an air gap: Rule .2513 (b)

G. CIRCULATION SYSTEM

- 1) Hair and lint strainer included; spare basket provided: Rule .2518 (e)
- 2) Pumps 3 HP or smaller meet or exceed NSF Standard 50; self-priming or located below pool water level; sized properly: Rule .2518 (h)
- 3) Filter meets NSF Standard 50, sized properly, necessary valves provided: Rule .2519
- 4) Pressure gauge and air relief valve on filter: Rule .2519 (l) and (n)
- 5) Automatic chlorine or bromine feeder meets NSF Standard: Rule .2535 (6)
- 6) Automatic chlorine or bromine feeder pump automatically prevented from operating when the circulation pump is not in operation: Rule .2535 (6)
- 7) Flow meter on filtered water line: Rule .2518 (g)
- 8) Pool heater meets Rule .2525, flow velocity through heater piping complies with Rule .2518 (d)

H. SPECIAL REQUIREMENTS FOR WADING POOLS (RULE .2531)

- 1) Located near shallow end of swimming pool: Rule .2531 (a)(7)
- 2) Separated from swimming pool by a fence with self-closing, self-latching gates. Wading pool fences constructed after April 1, 2000 shall be at least four feet high: Rule .2531 (a)(7)
- 3) Wading pool entrance gates located inside another public swimming pool enclosure shall open away from the deeper pool: Rule .2531 (a)(7)
- 4) Depth does not exceed 24 inches at the deepest point: Rule .2531 (a)(5)
- 5) Bottom slope does not exceed one foot in 12 feet: Rule .2531 (a)(6)
- 6) Deck provides 4 feet of clear walking space completely around the pool: Rule .2522 (c)
- 7) Circulation system meets minimum requirements in Rule .2531 (a)(2)
- 8) "No Lifeguard On Duty" signs specified to meet Rule .2530 (c)
- 9) No submerged suction outlets allowed unless inaccessible per APSP-7, .2518(j)(3).

H. SPECIAL REQUIREMENTS FOR CHILDREN'S ACTIVITY POOLS (RULE .2531)

(CHILDREN'S ACTIVITY POOLS ARE A SUBCATEGORY OF WADING POOLS)

- 1) Filter circulation system separate from any feature pump circulation pump system: Rule .2531 (b)(1)
- 2) Valves provided to control water flow to the features in accordance with the manufacturers' specifications: Rule .2531 (b)(4)
- 3) Meets all requirements for wading pools in Section H above.

I. SPECIAL REQUIREMENTS FOR SPAS AND HOT TUBS (RULE .2532)

- 1) Deck provides 4 feet of clear walking space at least one-half way around the spa: Rule .2522 (d)
- 2) Two drains provided for each pump drawing water from the spa: Rule .2532 (4)(a) & .2543(d)(3)
- 3) One surface skimmer for every 100 square feet or fraction thereof of spa surface area: Rule .2532 (4)(b)
- 4) Hydrotherapy pump or air blower controlled by 15 minute timer switch and placed such that a bather must leave the spa to reach the switch: Rule .2532 (7)
- 5) Depth does not exceed 4 feet: Rule .2532 (8)
- 6) Seat depth does not exceed 2 feet: Rule .2532 (9)
- 7) Stairs and handrail provided and meet Rule .2521
- 8) Contrasting color bands on stairs, seats and benches: Rule .2532 (13)
- 9) Minimum height between the top of the spa rim and the ceiling is specified to be at least 7 ½ feet: Rule .2532 (10)
- 10) Caution sign provided at entrance to spa or hot tub; letters on sign at least ½ inch in height with exact wording to meet Rule .2532 (15)
- 11) Sign provided in the immediate vicinity of the spa or hot tub stating location of nearest telephone; emergency numbers posted at indicated location: Rule .2532 (16) and .2530 (f)
- 12) Sign provided requiring each user to shower prior to entering the spa or hot tub and prohibiting oils, body lotion, and minerals in the water: Rule .2532 (17)
- 13) Vertical walls of spas do not exceed 15° from plumb: Rule .2532 (19)

J. SPECIAL REQUIREMENTS FOR INTERACTIVE PLAY ATTRACTIONS (RULE .2543)

- 1) Recirculation system has enough water capacity to meet Rule .2543 (d)(1)
- 2) Access provided to the surge water container: Rule .2543 (d)(2)
- 3) Variable height surface skimmer provided for the filter circulation system to draw water: Rule .2543 (d)(4)
- 4) Separate circulation system designed for 24 hour operation: .2543 (d)(5)
- 5) Automatic chemical controllers provided to monitor and adjust the disinfectant residual and pH of the water contained in the system: Rule .2543 (d)(6)
- 6) Chlorine feeder capable of producing 12 parts per million of free chlorine in the filter circulation piping: Rule .2543 (d)(7)
- 7) Valves provided to control water flow to the features in accordance with the manufacturers' specifications: Rule .2543 (d)(8)
- 8) Splash zones sloped to drain: Rule .2543 (d)(9)
- 9) Deck or walkway space not required outside splash zone: .2543(10)

- 10) Dressing and sanitary facilities provided: Rule .2543 (d) (11) Not required because of Session Law 2011-39
- 11) Interactive play attractions located inside a pool enclosure are NOT REQUIRED to provide a fence that meets the wading pool fencing requirements: Rule .2543 (d)(12) per Declaratory Ruling August 27, 2007
- 12) Sign provided prohibiting pets and glass containers: Rule .2543 (d)(13)

K. IN POOL EXERCISE EQUIPMENT (RULE .2542)

- 1) Equipment that remains underwater when not in use must meet .2524 (b)(1-5)

M. EXEMPTIONS AND SPECIAL REQUIREMENTS FOR SPECIAL PURPOSE AND THERAPY POOLS (.2544)

FLOAT TANKS

- 1) Deck space in .2522 exempted but clear floor space 4 ft by 8 ft required at entrance to the tank: Rule .2544 (b)(1)
- 2) Ceiling height in .2532(10) does not preclude use of a canopy of lower height to enclose tank provided the canopy can be opened to allow users a standing entry and exit from the tank. Rule .2544(b)
- 3) Lighting in .2524 exempted if lighting is provided for cleaning and entrance/ exit visibility is sufficient per .2524 (b)(3)
- 4) Operation of recirculation pump must meet Rule .2544(b) (4)
- 5) Water temperature above 95°F require standard spa sign requirements in .2532 per rule .2544(b) (6).

SWIM SPAS

- 1) Swim spa training pools may be above deck level if restricted use is under swim coach: Rule .2544 (c)(1)
- 2) Water depth in .2532 exempted allowing >4 feet per .2544 (c) 2)
- 3) Ladders, steps or stairs in .2521 exempted for above-ground swim spa where a handhold or handrail is provided per .2544 (c)(3)

EXERCISE THERAPY AND TREADMILL POOLS

- 1) Water depth in .2532 exempted allowing > 4 ft per .2544 (d)(1)
- 2) Exercise spas > 1000 gallons exempted turnover in .2532 and required < 2 hour turnover rate per .2544 (d)(2).

SCUBA TRAINING POOLS

- 1) Rule .2544 (e)(1) exempts underwater ledges under .2516(b)
- 2) Rule .2544 (e)(2) requires all other swimming pool requirements to be met at scuba training pools.