19-13-B33b. Public pools

The following requirements shall apply to any public pool.

(a) Definitions.

(1) "Public Pool" means an artificial basin constructed of concrete, steel, fiberglass or other relatively impervious material intended for recreational bathing, swimming, diving, or therapeutic purposes which is located either indoors or outdoors and is provided with a controlled water supply and which is not used or intended to be used as a pool at a single family residence. The term also includes a pool located at a single family residence which is used or intended to be used for commercial or business purposes. The term "public pool" includes any related equipment, structures, areas, and enclosures that are intended for the use of the pool patrons or pool staff such as toilet, dressing, locker, shower, and pool equipment rooms. Public pools shall be classified as follows:

(A) "Public Swimming Pools" are conventional pools used or intended to be used for recreational bathing, swimming and water recreation activities.

(B) "Public Wading Pools" are pools principally used or intended to be used for wading and recreational bathing by small children.

(C) "Public Spas," "Whirlpools," or "Hot Tubs" are pools used for recreational bathing which are used in conjunction with high velocity air systems, high velocity water recirculation systems, hot water, cold water, mineral baths or any combination of these items.

(D) "Public Diving Pools" are pools used only for diving or the training and practice of diving techniques.

(E) "Special Purpose Public Pools" are pools used exclusively for a particular purpose, including but not limited to water flumes, pools for scuba diving instruction, therapeutic pools, hydrotherapy pools, floatation vessels and pools used in aquatic programs for handicapped persons.

(2) "Commissioner" means the commissioner of health services or his designee.

(3) "Depth Markers" means numerals of four inches minimum height which are of a contrasting color with the background of the pool and denote water depth in the immediately adjacent portion of the pool.

(4) "One Unit of Lifesaving Equipment" shall consist of a ring buoy not more than fifteen inches inside diameter to which shall be attached a fifty foot length of one-quarter inch line, and a life pole or shepherd's crook with blunted ends which is a minimum of twelve feet in length.

(b) General requirements for public pools.

(1) Construction. No person shall construct a public pool or shall substantially alter or reconstruct any public pool except after the plans for such have been approved in accordance with the specifications contained in the most recent edition of the Connecticut Public Swimming Pool Design Guide as adopted and amended by the commissioner. Such plans shall be prepared by and bear the seal of an engineer or architect licensed to practice in the State of Connecticut and shall be approved by the commissioner. The applicant shall forward copies of the approved plans to the director of health or his authorized agent. All public pools shall be constructed or substantially altered or reconstructed in accordance with the plans and
specifications approved by the commissioner unless prior approval of changes has been granted in writing. The danger of disease, drowning or injury to bathers shall be reduced to a practical minimum. The commissioner may evaluate public pools constructed without the required plan approval to assess conformance with specifications of the Connecticut Public Swimming Pool Design Guide. The commissioner may issue a "certificate of approval for use" to public pools on which construction was completed prior to January 1, 1980 and which are found to comply substantially with the aforementioned criteria. No such certificate shall be issued where deviations from design criteria may substantially increase the risk to public health and safety.

(2) Supervisory Personnel. A person knowledgeable in the operation of the pool and in pool water chemistry and testing shall be on duty on the premises where the pool is located whenever the pool is open for use. Names of supervisory personnel shall be submitted to the local health department annually and whenever a change in such personnel occurs.

(3) Pool Water Quality. Not more than Fifteen per cent of the samples of pool water covering a consecutive period of one month or more shall either (1) yield more than two hundred bacterial colonies per milliliter, as determined by the standard (35 degrees C) agar plate count, or (2) show positive test (confirmed test) for coliform organisms in any of five 10-mL portions innoculated into fermentation tubes or contain more than 1.0 coliform colonies per 50 mL when the membrane filter test is used. All samples shall be collected, the residual disinfectant removed, and the examination conducted in accordance with the procedures outlined in the latest edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association, American Water Works Association, and Water Pollution Control Federation).

(4) Pool Water Clarity. At all times when the pool is in use the water shall be sufficiently clear to permit a secchi disc or a black disc six inches in diameter on a white field, placed on the bottom of the pool at the deepest point, to be clearly visible from the pool deck.

(5) Pool Water Disinfection and Test Kits. Pool water shall be disinfected by an automatic disinfectant feeder which imparts a measurable residual at all times when the pool is in use. These chemical feeders shall comply with the standards of the National Sanitation Foundation or other standards approved commissioner of health services. When chlorine is used, a free chlorine residual of at least 0.8 mg/l as measured by an approved method listed in "Standard Methods for the Examination of Water and Wastewater" as described in subsection 3 above shall be maintained throughout the pool whenever it is open or in use. If cyanuric acid is used to stabilize the free available residual chlorine, or if chlorinated isocyanurate compounds are used, the concentration of cyanuric acid in the water shall not exceed 100 mg/l and a free available chlorine residual of at least 1.5 mg/l shall be maintained throughout the pool whenever it is open or in use. If other halogens are used, residuals of equivalent disinfecting strength shall be maintained. Other disinfecting materials or methods may be used when they have been demonstrated to the commissioner to provide satisfactory disinfection. A test kit for measuring the concentration of the disinfectant, accurate within 0.1 mg/l shall be provided, at each pool. If the cyanuric acid or chlorinated isocyanurates are
(6) Pool Water pH and Alkalinity. The pool water shall be maintained at a pH value of not less than 7.2 and not over 7.8. Testing equipment for measuring pH value shall be available at each pool. Caustic alkalinity shall not be present.

(7) Records and Testing. A pool operation record including all test results shall be maintained on a daily basis by the pool operator. Immediately prior to the daily opening of the pool for use, tests shall be made to determine the amount of residual disinfectant and the pH. These tests shall be repeated at sufficient frequency during periods of bather use to assure that an adequate disinfectant level and pH value are maintained. Whenever tests indicate that an inadequate disinfectant level or inappropriate pH value are present, immediate action shall be taken to reestablish an appropriate disinfectant level and pH value.

(8) Decks, Dressing Rooms, Toilet Rooms, Shower Requirements. The dressing rooms, hallways, toilet rooms, shower rooms or other rooms to which patrons of pools have access shall be kept clean, in good repair, and well ventilated at all times. The floors of the pool deck and all shower rooms and locker rooms shall be treated with a 0.5% chlorine solution, or an equivalent fungicide, daily. Combs or brushes for common use shall not be provided. All persons shall bathe with warm water and soap before entering the pool. Warm water at a temperature of 90 degrees F to 105 degrees F, shall be furnished at showers convenient to the pool for this purpose. Adequate and convenient toilet facilities shall be available for the use of swimmers. Toilet, lavatory sink, and shower fixtures shall be maintained in proper repair so as to be available in ratios required by Design Criteria in effect at the time of plan approval.

(9) Equipment Rooms, Equipment Areas, and Equipment. Equipment rooms, areas, and equipment shall be kept in good repair and in a clean and sanitary condition. Drain grates shall be vandal proof, designed to prevent hand entrapment, and shall be secured in place in a manner that will prevent removal by bathers.

(10) Deck Equipment. Handrails shall be provided at all steps, stepholes, and ladders. When provided diving stands, lifeguard stands, handrails, and ladders shall be properly secured to the pool deck or pool, as appropriate. Deck accessories and equipment shall be properly maintained and stored.

(11) Pool Chemical Storage. Pool chemicals shall be stored in cool, dry, clean, and well ventilated areas and so as to preclude accidental mixing of different chemicals. Containers shall be tightly closed when not in use.

(12) Vacuuming. Pool bottoms shall be vacuumed or mechanically cleaned as frequently as required to maintain pool cleanliness.

(13) Accessibility to Pool Area. All outdoor pools shall be surrounded by a barrier which shall be a minimum of four feet high and designed to discourage access by unauthorized persons. Entry gates shall be self closing and self latching. When the pool is not open for use, access to the pool shall be prevented.

(14) Lifeguards. When no lifeguard service is in effect a warning sign shall be placed in plain view and shall state "Warning - No Lifeguard on Duty" with legible letters, at least four inches high. This warning shall be easily visible from all entry points into the pool area.
(15) First Aid Kit. Every public pool shall be equipped with an American National Red Cross standard 24-unit first aid kit or equivalent. This first aid kit shall be kept filled and ready for use.

(16) Emergency Telephone. There shall be a telephone or other suitable device for emergency communication readily available in the immediate vicinity of each pool. This telephone or device shall be on the premises where the pool is located.

(17) Signs. Signs shall be conspicuously posted at the pool and in public dressing rooms stating the following:
   (A) All persons shall bathe with warm water and soap before entering the pool.
   (B) Any persons known or suspected of having a communicable disease shall not use the pool.
   (C) Spitting or blowing the nose in the pool is prohibited.
   (D) Running, boisterous or rough play (except supervised water sports) is prohibited.

(18) Emergency Communications. Instructions regarding emergency calls shall be prominently posted. All pools shall have posted at their entrance (a) directions to the nearest telephone and the nearest first aid unit and resuscitation equipment; (B) the telephone numbers, in print at least one-quarter inches high, of the nearest police and fire departments, emergency medical service provider, hospital and physicians on call in the immediate area. Additionally these telephone numbers shall be posted at the nearest telephone.

(19) Registration. No person, firm, or corporation shall operate or maintain, within any town, city or borough, any public pool without local permits or licenses if such permits or licenses are required by local ordinance. If such local permits or licenses are not required, the person, firm or corporation shall register the name of the owner or owner's agent, business address, and pool location with the local director of health of the town, city, borough, or district where the public pool is located.

c) Additional requirements for public swimming pools and public diving pools

(1) Depth Markers. Depth markers shall be provided on the pool rim at points of minimum and maximum depths, at all points where the pool floor changes slope, and at appropriate points in between. Depth markers at these points shall be visible from within the pool and while standing on the pool deck.

(2) Lifeguard Stands. When a lifeguard is on duty, there shall be a raised stand 4 feet minimum height for the lifeguard, located at pool side adjacent to the deep end of the pool, so that all areas of the pool are visible to the lifeguard.

(3) Lifesaving Equipment. Each public Swimming pool and public diving pool shall be provided with one unit of lifesaving equipment for each one hundred feet of perimeter of the pool. Life poles or shepherd's crooks shall be mounted in permanent sockets toward the deep area of the pool. Lifesaving equipment shall be mounted in conspicuous places around the pool such as on lifeguard stands, fences or barriers of outdoor pools, and room walls of indoor pools.

(4) Sign. A sign stating the following shall be conspicuously posted at the pool: "No diving is permitted off the deck into shallow areas of the pool."

d) Additional requirements for public wading pools. Depth Markers. A minimum of one depth marker shall be provided on the pool rim on each side of public wading pools.

e) Additional requirements for public spas.
(1) Pool Water Disinfection. When chlorine is used, a free available chlorine residual of at least 1.0 mg/l shall be maintained throughout the public spa whenever it is open or in use. If other halogens are used, residuals of equivalent disinfecting strength shall be maintained.

(2) Pool Water Temperature. Pool water temperature shall not exceed 104 degree F in public spas.

(3) Depth Markers. All public spas shall have a minimum of two depth markers indicating maximum water depth. These depth markers shall be located on the spa rim or deck immediately adjacent to the pool.

(4) Precaution Sign. A precaution sign is to be mounted in a clearly visible location, adjacent to the spa. This precaution sign shall contain the following warnings:

CAUTION

(A) Elderly persons and those suffering from heart disease, diabetes, high or low blood pressure should not enter the spa.

(B) Unsupervised use by children is prohibited.

(C) Do not use while under the influence of alcohol, anticoagulants, antihistamines, vasoconstrictors, vasodilators, stimulants, hypnotics, narcotics or tranquilizers.

(D) Do not use alone.

(E) Observe a reasonable time limit, (preferably not longer than 15 minutes) then shower, cool down and, if you wish, return for another brief stay. Long exposures may result in nausea, dizziness or fainting.

(5) Oils, Body Lotions and Soaps. Oils, body lotions and soaps shall be completely removed by the bather prior to use of public spas.

(f) Special purpose public pools. Special purpose public pools shall meet all applicable requirements for public pools.

(g) Responsibility of director of health. When any public pool is found not to meet the requirements of these regulations, or when a condition is found which constitutes a public health or safety hazard or a health nuisance to bathers or pool patrons, the director of health may order such public pool closed until corrections are made. The director of health shall order such closure when there is significant evidence of communicable disease being transmitted through use of the pool, when the public pool is being operated in such manner as to constitute a significant health nuisance, or when imminent safety hazards exist. Inspections shall be conducted by the director of health or his authorized agent to evaluate conformance with these regulations and to protect the public health and safety. Any person aggrieved by an order issued by a director of health, may within forty-eight hours after the making of such order, appeal to the commissioner of health services in accordance with Section 19a-229 of the General Statutes and Sections 19-2-1 to 19-2-43 inclusive of the Regulations of Connecticut State Agencies.

(Effective October 26, 1984.)
EHS Circular Letter #2008-27

TO: Directors of Health/Districts
    Chief Sanitarians, Building Officials, and
    Pool Contractors, Engineers and Architects

FROM: Pamela E. Scully
      Sanitary Engineer III
      Recreation Program
      Environmental Health Section

RE: ADDENDUM TO THE CONNECTICUT PUBLIC SWIMMING POOL
    DESIGN GUIDE

DATE: April 14, 2008

The attached addendum contains criteria that will be incorporated into the public swimming pool
design requirements effective as of the date of this letter. All applications must have these
changes incorporated into their design in order to be considered for approval.

These changes are being implemented as a result of the Virginia Graeme Baker Pool and Spa
Safety Act; a Federal Law that mandates new safety measures. Please note that with these new
revisions all public pools (swimming, wading, whirlpool spa, etc.) approved, from this date
forward, will be required to have a minimum of two main drains.

Please call this office at 860-509-7296 with any questions.

cc: Suzanne Blancaflor, Chief, Environmental Health Section, DPH
    Pamela Kilbey-Fox, Branch Chief, Local Health Administration Branch, DPH
ADDENDUM TO THE CONNECTICUT PUBLIC SWIMMING POOL DESIGN GUIDE
EFFECTIVE AS OF APRIL 14, 2008

**Inlets and Outlets** (Main Drains)

Section 6.2:  (REVISION)

In all newly constructed public pools, with plans and specifications approved after the effective date of this addendum, a minimum of two (2) main drains (outlets) shall be provided. One outlet must be located at the deepest point of the pool (Section 6.1); while the second outlet may also be located on the pool floor or near the bottom of the pool on a nearby side wall. A minimum separation distance of three (3) feet, measured edge of cover to edge of cover, shall be maintained between each outlet. Where the width of a pool is more than 30 feet, outlets shall be spaced no more than 30 feet apart, nor more than 15 feet from sidewalls.

Section 6.2 a: (NEW)

Each outlet shall have its own suction pipe that shall be manifolded with the suction pipe(s) from the other outlets prior to the circulating pump. The manifold shall be located in close proximity to the location of the drains. The piping system shall be valved to permit adjustment of flow through it (Section 6.1); however, no valves shall be located on the outlet suction pipes prior to the manifold.

Section 6.2 b: (NEW)

All main drain covers in public pools must conform to the entrapment protection standard of the current ASME/ANSI A112.19.8 performance standard.

**Main Drains – Wading Pools**

Section 25.3: (REVISION)

Main Drains for wading pools must comply with Sections 6.1, 6.2, 6.2a and 6.2b of the Connecticut Public Swimming Pool Design Guide, with the requirement for two main drains applying to both newly constructed and existing wading pools.

**Main Drains - Whirlpool Spas**

Section 26.8 (REVISION)

Main Drains for whirlpool spas must comply with Sections 6.1, 6.2, 6.2a and 6.2b of the Connecticut Public Swimming Pool Design Guide.

Rev: 4/14/2008