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SWIMMING POOL CODE OF NEW JERSEY — 1970

PUBLIC HEALTH AND SANITATION CODES
subject to adoption by reference by local boards of health in
accordance with R.S. 26:3-69.1 to 69.6 and not enforceable
until so adopted.

SWIMMING POOL CODE OF NEW JERSEY

The Code entitled "Swimming Pool Code of New Jersey
— 1970" set forth below, was approved by the State
Department of Health. It may be adopted without
alteration, or if so desired, any numbered section or
paragraph may be deleted therefrom, but no substitute
section or paragraph may be added as part of the Code
being adopted by reference under Chapter 188, P.L. 1950
(N.J.S.A. 26:69.1 to 69.6).

It is recommended that this Code be adopted in full.

SECTION 1 DEFINITIONS

1.1 The words, terms or phrases listed below for the
purpose of this Code and Ordinance shall be defined and
interpreted as follows:

Administrative Authority — The Administrative
Authority is the board of health.

Alter — Alter shall mean and include any major
replacement or repair to any portion or unit of an existing
swimming pool.

Authorized Agent — An authorized agent is a licensed
health officer, sanitary inspector, or any other properly
qualified and licensed person who is delegated to function
within specified limits as the agent of the Administrative
Authority.

Approved — Approved shall mean accepted or
acceptable under applicable specifications stated or cited in
this Code, or accepted as suitable for the proposed use
under procedures and powers of administration delegated
in this Code.

Construct — Construct shall mean and include building
or installing a new swimming pool or enlarging an existing
swimming pool or any of its facilities.

Locate — Locate shall mean designating the site or
place of a swimming pool.

Operate — Operate shall mean to conduct, maintain or
otherwise provide facilities for bathing at swimming pools.

Person — Person includes corporations, companies,
associations, societies, firms, partnerships and joint stock
companies as well as individuals.

Swimming Pool — Swimming pool shall mean and
include fill and draw, flow through and recirculation pools,
outdoor and indoor, which are artificially constructed to
provide recreational facilities for swimming, bathing or
wading and all buildings, equipment and appurtenances
thereto.

It shall not include naturally or artificially constructed
outdoor ponds, rivers or lakes, nor baths used for cleansing
of the body or practice of the healing arts. It shall not
include swimming or wading pools established or
maintained upon any premises by any individual for his
own or his family's use or guests of his household.

Wading Pool — A wading pool is a shallow pool
intended for use by children.

SECTION 2 ADMINISTRATION

**2.1 Approval to Locate and Construct or
Alter** — Swimming pools shall not be located and
constructed or altered by any person until the
Administration Authority has given formal approval
therefor by issuance of a license or permit.

**2.2 Procedure for Obtaining Approval to Locate
and Construct** — Licenses or permits shall not be issued
until the Administrative Authority has received and
approved a letter or application therefor, together with
letters of approval from the planning and zoning agencies,
and final plans, specifications and reports prepared by a
licensed professional engineer or registered architect fully
describing and setting forth all data as hereinafter required
or as may otherwise be required by the Administrative
Authority or its authorized agent.

(a) Plans, specifications and reports shall include but not
be limited to:

Proposed site of the pool.

Nature and extent of the area to be served by the pool
including type of pool (general public, club, instructional,
camp, etc.) and estimated daily patronage and method of
estimation.

Basic design factors, including pool use and capacities of
various units; source, volume, and nature of various wastes
and method of disposal.

Pool layout, construction and dimensions, including
piping arrangement, pumps, bathhouses, toilet facilities
and all other pool appurtenances, including recreational
facilities.

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Disposal facilities for filter wastewaters, sanitary sewage and shower wastes if a municipal sewer is not available or if a municipal sanitary sewer is available, the details of connection thereto.

Proposed operation and maintenance procedure.

Proposed supervisory personnel and safety equipment.

Well construction if public water supply is not available.

Specifications for construction of the swimming pool shall accompany all detail plans and reports.

(b) Upon compliance with all provisions of this Ordinance and Code and approval of the final plans, specifications, and report, together with the data contained therein, a license or permit shall be issued for the facility.

2.3 Procedure for Obtaining a License or Permit to Alter –

(a) A license or permit to alter a swimming pool shall not be issued until the Administrative Authority has received a letter of application therefor, together with such plans, specifications or reports as may be requested by the Administrative Authority to fully described the proposed alteration.

(b) Upon compliance with all applicable provisions of this Ordinance and Code and approval of the requested alteration or proposal, a license or permit shall be issued for said alteration.

2.4 Proposed Design or Construction Not Conforming to Code – Proposed design or construction features of a pool differing from the provisions of this Code may be approved upon submission of evidence to the satisfaction of the Administrative Authority that public health or safety would not be affected by such design or construction.

2.5 Existing Swimming Pools – Section 2 to 12, inclusive, of this Code relating to location and construction shall not apply to swimming pools in existence at the time of its adoption, except that any alterations of any unit or units of such swimming pool shall be made in accordance with the applicable provisions of this Code. The provisions for enclosure in Sections 3.14 and 5.1 shall apply to all pools.

2.6 Approval to Operate – Swimming pools shall not be operated by any person until the Administrative Authority has given formal approval therefor by issuance of an appropriate license or permit. This license or permit shall be displayed in a conspicuous place on the premises where it may be readily observed by all patrons. No person shall operate a pool whose license therefor is suspended.

2.7 Procedure for Obtaining License or Permit to Operate – Licenses or permits to operate a swimming pool shall not be issued until a properly executed application containing information as requested on a form supplied by the Administrative Authority has been submitted and approved by that body.

2.8 Denial of License or Permit – Persons denied a license or permit shall be notified in writing accordingly by the Administrative Authority. Such notice shall specify the reason for such action and the remedial action necessary to obtain approval for issuance of a license or permit.

2.9 Suspension of License or Permit to Operate – The license or permit of any person to operate a swimming pool may be suspended at any time when in the opinion of the Administrative Authority or its authorized

agent such action is necessary to abate a present or threatened menace to public health.

2.10 Suspension Notification – The person whose license or permit has been suspended or his representative in charge of the pool shall, at the time such license is suspended, be informed that the license or permit to operate the pool is suspended, the reason for such action and the remedial action to be taken before the suspension may be lifted. Thereafter and within 24 hours, written notice of suspension containing the same information given at the time a license is suspended shall be forwarded registered mail to the last known address of the person whose license was suspended.

2.11 Hearings

(a) Persons whose licenses or permits have been suspended shall be afforded a hearing before the Administrative Authority within three (3) days after such suspension, or thereafter at such persons' option, to show cause why the suspension should be lifted. The Administrative Authority shall, within seven (7) days after such hearing render a written decision confirming or rescinding the suspension and shall notify the person whose license or permit has been suspended in writing of its action and reasons therefor.

(b) Persons whose licenses or permits have been denied shall be afforded a hearing before the Administrative Authority within seven (7) days after such denial, or thereafter at such persons' option to show cause why a license or permit should be granted. The Administrative Authority shall, within seven (7) days after such hearing, render a written decision confirming or rescinding the denial of a license or permit and shall notify the person whose license or permit has been denied in writing of its action and reasons therefor.

2.12 Monthly Operating Reports – Reports of pool operation shall be submitted to the Administrative Authority or its authorized agent within ten (10) days after the last day of the preceding month upon report forms furnished by the Administrative Authority.

SECTION 3

GENERAL LAYOUT AND DESIGN

3.1 Location – The site of all proposed swimming pools shall be such that proper and adequate water supply and waste disposal facilities will be available. In the case of outdoor pools, topography, protection from prevailing winds, the absence of trees in the near vicinity, distance from dusty roads and smoke producing industries shall be considered in determining the suitability of proposed sites.

3.2 Layout – Pool layout shall be such that bathers leaving the dressing rooms will first have access to toilets and then shower facilities. Exits and entrances shall preferably be located at the shallow end of the pool.

The requirement relating to dressing rooms, bathhouses, and toilets and showers may be waived when such facilities are conveniently available to bathers.

3.3 Materials of Construction – All materials used shall be durable, waterproof and easily cleaned, as well as inert and nontoxic to man. The bottom and sides of pools shall be finished in white or light color and shall be free

from cracks or open joints. Walkways around pools shall be light of color, easily cleaned and slip-proof. Sand or earth bottoms directly exposed to the pool water shall not be permitted.

3.4 Size — The pool area shall be proportioned as follows:

(a) 10 square feet shall be provided for each nonswimmer expected to be present at the time of maximum load. Nonswimming sections shall be less than five feet in depth.

(b) 24 square feet shall be provided for each swimmer expected to be present at the time of maximum load. Swimming sections shall be greater than five feet in depth.

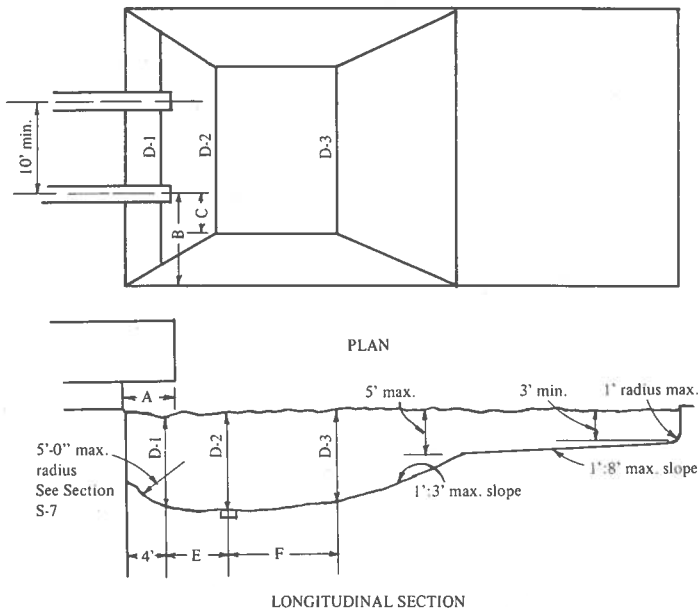
(c) 300 square feet shall be reserved around each diving board or platform provided for diving purposes and shall not be included in determining the area of the swimming section.

3.5 Diving Area Design — The water depths and dimensions of swimming pool diving areas shall be in accordance with the sketch No. 1.

3.6 Bottom Slope — The slope of the bottom of a pool having a water depth of less than five feet shall not exceed 1:10, except in pools less than 1200 square feet where a slope of 1:8 may be permitted provided a life line shall be installed at least two feet from the transition point toward the shallow end. (See Sketch No. 1)

SKETCH NO. 1

MINIMUM DEPTHS AND CLEARANCES FOR DIVING BOARDS



| Height of Board Above Water Level | Water Depth | | | Section Dimensions | | | | |
|-----------------------------------|-------------|--------|--------|--------------------|--------|-------|-------|--------|
| | D-1 | D-2 | D-3 | A | B | C | E | F |
| 1'-6" min. | 7'-0" | 8'-0" | 7'-6" | 2'-6" | 7'-0" | 2'-0" | 5'-0" | 6'-0" |
| 2'-6" min. | 8'-0" | 8'-6" | 8'-0" | 2'-6" | 8'-0" | 3'-0" | 5'-0" | 6'-0" |
| 1-meter min. | 8'-6" | 9'-0" | 8'-0" | 4'-0" | 9'-0" | 5'-0" | 6'-0" | 9'-0" |
| 3-meter min. | 10'-0" | 11'-0" | 10'-0" | 5'-0" | 10'-0" | 5'-0" | 7'-0" | 12'-0" |

Pool walls and floors must not be inside the above clearances.
Diving facilities higher than 3-meter - See A.A.U. current recommendations.

3.7 Walls

(a) Walls of a swimming pool shall be either (a) vertical for water depths of at least six feet; or (b) vertical for a distance of three feet below the water level below which the

wall may be curved to the bottom with a radius not greater than the difference between the depth at that point and three feet, provided that vertical is interpreted to permit slopes not greater than one foot horizontally for each five feet of depth of sidewall (11° from vertical).

(b) Safety ledges when provided on vertical walls in the deep portion of the swimming pool shall not be over four inches wide, at least four feet below the water surface, and shall slope one-half inch in four inches toward the pool.

3.8 Marking — Critical depths of pools are those at both ends and also at change of slope locations of the pool. Such critical depths shall be conspicuously marked in a permanent manner on either or both the horizontal or vertical surfaces of the pool above the water level. Markings at one foot depth intervals are considered desirable.

3.9 Overflow Collection System — An overflow gutter, automatic skimmer(s) or other satisfactory cleaning device shall be provided for all public swimming pools.

3.10 Overflow Gutters — On pools where overflow gutters are proposed, they shall extend completely around the swimming pool, except at steps. The overflow gutter shall also serve as a handhold.

This gutter shall be capable of continuously removing 50 percent or more of the recirculated water and return it to the filter. The gutter, drains, and return piping to the surge tank should be designed to rapidly remove overflow water caused by recirculation displacement, wave action, or other causes produced from the maximum pool bathing load. The opening into the gutter beneath the coping shall be not less than four inches and the interior of the gutter shall be not less than three inches wide with a depth of at least three inches. Where large gutters are used, they shall be designed to prevent entrance or entrapment of bathers arms or legs. The overflow edge or lip shall be rounded and not thicker than 2½ inches for the top two inches. The overflow outlets shall be provided with outlet pipes or other suitable conduits which shall in any case be at least two inches in diameter. The outlet fittings shall have a clear opening in the grating at least equal to 1½ times the cross sectional area of the outlet pipe. Nothing in this section shall preclude the use of roll-out or deck level type swimming pools. Such designs shall conform to the general provisions relating to overflow rates. The design of the curb and handhold shall conform to accepted standards and approval shall be based on detailed review of this feature of construction and evaluated in the light of proposed use of the pool.

3.11 Skimmers — Skimmers are permitted on public swimming pools, providing approved handholds are installed and sufficient motion to the pool water is induced by the pressure return inlets. At least one skimming device shall be provided for each 600 square feet of water surface area or fraction thereof. Where two or more skimmers are required, they shall be so located as to minimize interference with each other and to insure proper skimming of the entire pool surface. Skimming devices shall be built into the pool wall, shall develop sufficient velocity on the pool water surface to induce floating oils and wastes into the skimmer from the water surface of the entire pool area, and shall meet the following general specifications:

(a) Handholds shall consist of bull-nosed coping not over 2½ inches thick for the outer two inches or an

equivalent approved handhold. The handholds must be no more than nine inches above the normal waterline.

(b) The piping and other pertinent components of skimmers shall be designed for a total capacity of at least 80 percent of the required filter flow of the recirculation system and no skimmer shall be designed for a flow-through rate of less than 30 gallons per minute or 3.75 gallons per minute per lineal inch of weir.

(c) The skimmer weir shall be automatically adjustable and shall operate freely with continuous action to variations in water level over a range of at least four inches. The weir shall be of such buoyancy and design so as to develop an effective velocity.

(d) An easily removable and cleanable basket or screen through which all overflow water must pass shall be provided to trap large solids.

(e) The skimmer shall be provided with a device to prevent air lock in the suction line. If an equalizer pipe is used, it shall provide an adequate amount of water for pump suction should the water of the swimming pool drop below the weir level, provided that, if any other device, surge tank, or arrangement is used, a sufficient amount of water for pump suction shall be assured.

(f) Where the equalizer pipe is used, it shall be sized to meet the capacity requirements of the filter and pump and shall in no case be less than two inches in diameter. This pipe shall be located at least one foot below the lowest overflow level of the skimmer. It shall be provided with a valve or equivalent device that will remain tightly closed under normal operating conditions, but will automatically open when the water level drops as much as two inches below the lowest weir level.

(g) The skimmer shall be of sturdy, corrosion-resistant materials.

3.12 Decks and Walkways — A continuous deck at least five feet (and preferably eight or more feet) wide shall extend completely around the swimming pool. The deck shall be sloped away from the pool to drain at a grade of $\frac{1}{4}$ inch to $\frac{3}{8}$ inch per lineal foot and shall have a nonslip surface. Deck drains shall not be connected to the recirculation system or gutters, except as permitted in Section 3.10.

3.13 Ladders and Stairs — Ladders for entering and leaving a pool shall be constructed of nonslip tread and shall be located at both sides of the deep section. If the wall height at the shallow end of a pool is more than two feet, ladders or steps shall be provided. Where stairs are proposed they shall be installed only at the shallow end of the pool. Stairs, ladders or steps shall have a handrail on either side with the top leading out over the walkway. There shall be a clearance of not more than five inches nor less than three inches between any ladder and the pool wall. If steps are inserted in the walls or if stepholes are provided, they shall be of such design that they may be cleaned readily and shall be arranged to drain into the pool to prevent the accumulation of dirt thereon. Stepholes shall have a minimum tread of five inches and a minimum width of 14 inches.

3.14 Enclosures — Pools shall be surrounded with a fence, wall or other enclosure with a minimum of four feet heights for the safety and control of patrons and spectators and the enforcement of pool regulations. Such barriers shall be impenetrable by toddlers and so installed as to

afford no handholds or footholds. Self-closing and self-latching mechanisms shall be provided on gates, etc. at entrance ways and permanent locking shall be available for periods when the pool is closed.

3.15 Sand Area — Sand areas are not recommended. If provided, sand areas shall be separated from the pool and enclosed with a fence having a separate entrance and exit. The exit or return gate shall be provided with a shower and foot wash having continuous circulation. At least six inches of sand shall be provided.

3.16 Lighting and Electrical Requirements

(a) Where underwater lighting is used, not less than 0.5 watts shall be employed per square foot of swimming pool surface area. Such lights shall be spaced to provide illumination so that all portions of the pool, including the bottom, may be readily seen without glare.

(b) Area lighting shall provide at least 0.6 watts per square foot of deck area. If such lighting is used for night swimming, area and swimming pool lighting combined shall provide at least 2 watts per square foot of pool area with two foot candles of illumination.

(c) All electrical wiring shall conform with the National Electrical Code of the National Fire Protection Association, Article 680.

(d) No overhead electrical wiring shall pass within 20 feet of the swimming pool enclosure.

SECTION 4

DIVING STANDS AND BOARDS

4.1 Diving Stands — Diving stands, when provided, shall be rigidly constructed and properly anchored with sufficient bracing to insure stability under the heaviest possible load. Slides and rope drops shall not be permitted.

4.2 Floats — Fixed platforms and floats shall not be permitted.

4.3 Headroom — At least 15 feet free and unobstructed headroom shall be provided above diving boards and stands.

4.4 Height — Diving boards or platforms available for use by the general public shall not be more than 10 feet above water level. For special purpose swimming pools the standards of FINA International Amateur Swimming and Diving Federation.

4.5 Covering — Spring boards and diving platforms shall be covered with nonslip material.

SECTION 5

WADING POOLS

5.1 Layout — Wading pools, if constructed adjacent to a swimming pool, shall be separated therefrom by a fence or other enclosure meeting the requirements for enclosures for pools, Section 3.14 of this Code.

5.2 Depth Requirements — Wading pools shall not be designed or used for swimming or diving. The maximum water depth allowed shall be 18 inches.

5.3 Circulation and Treatment — Wading pools may be approved only when used either in conjunction with the regular swimming pool circulation and treatment units or continuously wasted. The entire contents of the wading pool shall be recirculated or wasted within at least one (1) hour.

SECTION 6

RECIRCULATION SYSTEM

6.1 Capacity — A recirculation system consisting of pumps, piping, filters, water conditioning and disinfecting equipment and other accessory equipment shall be provided, which will clarify and disinfect the swimming pool volume of water in eight hours or less, thus providing a turnover of at least three times in each 24 hour period.

When wading pools are incorporated in the same area, the recirculation system shall be modified to also meet the turnover requirements for wading pools.

6.2 Pumps — Pumps shall have capacities as required in Section 6.1 and also be capable of backwashing filters. Pumps located above pool level shall be of self-priming design. If filters are above the waterline of a pool, a check valve in the suction line is required. Recirculation pumps used in conjunction with suction cleaners shall be designed to operate against a total dynamic head of at least 50 feet at the rated capacity.

6.3 Piping — The piping system shall be designed to:

- (a) Fill the pool.
- (b) Circulate the pool water through the treatment equipment.
- (c) Wash each filter individually.
- (d) Filter to waste.
- (e) Operate suction cleaner if recirculation pumps are used.
- (f) Empty the pool.
- (g) Drain the entire system.

Flange joints or unions shall be inserted at intervals to permit any part of the system to be cleaned and repaired.

Sampling taps shall be placed conveniently for obtaining samples of the water entering and leaving the pool. These taps may be located in conjunction with influent and effluent pressure gauges.

6.4 Piping systems shall be identified as required by the Administrative Authority.

6.5 Protection of Potable Water Supply — Physical connections between potable water systems and swimming pool circulation systems shall not be permitted.

Potable water for make-up purposes shall be introduced either into a float controlled surge tank having an air gap at least six inches above the overflow rim of the tank or directly into the pool by means of a discharge pipe located beneath a diving board and turned downward with a air gap at least six inches above the pool overflow level.

Water injector equipment shall use water either from the surge tank or recirculating system. Where the recirculation pump is not adequate to operate such equipment, auxiliary pump (s) shall be provided.

6.6 Hair and Lint Catcher — At least one catcher shall be installed with duplicate strainer baskets provided. Catcher shall be located on the suction side of all pumps. Catcher covers shall be held in place by suitable means for quick removal of the strainer for cleaning purposes. Valves shall be installed adjacent to the strainer in order that the flow may be shut off during cleaning or inspection. A gauge shall be provided to determine head losses in each catcher.

Strainers shall be of noncorrosive material; circular openings, when provided, shall have diameters not exceeding 1/8 inch; square mesh openings shall not exceed 1/10 inch on each side. Slotted strainers shall not exceed

1/10 inch in width nor 1 inch in length. The total area of strainer openings shall be at least 10 times the cross sectional area of the main circulatory line from the pool drain.

6.7 Vacuum Cleaners — Vacuum cleaners either of the portable type or as part of the permanent piping system are required. Integral connections, when provided, shall be insufficient number and located in the side wall of the pool at least six inches below the water level, or as adapted to surface skimmers. Pool connections shall not project beyond the side wall. Fixed pipe connections shall be at least two inches in diameter and shall be connected to the pump suction through the hair and lint catcher. A means shall be provided to throttle flow from the pool outlets in order to permit maximum efficiency when a vacuum cleaner is to be operated by a recirculation pump.

6.8 Inlets — Inlets for fresh and/or recirculated filtered water shall be located to produce a uniform circulation of water without the existence of dead spots to facilitate the maintenance of a uniform disinfectant residual throughout the entire swimming pool. Inlets shall not be closer than 12 inches from the overflow level, unless provided with a suitable device for eliminating surface turbulence. Inlet fittings shall be designed so as not to create a hazard to bathers. The flow of water through inlets shall be controlled either by means of valves or adjustable orifices.

6.9 Outlets — Outlet openings shall have an area of at least four times the discharge pipe area. When outlets are installed in the pool floor near one end, the spacing shall not be greater than 20 feet on centers and the outlets shall not be installed more than 15 feet from any sidewall. At least one outlet shall be provided at the lowest point of the floor to completely drain the entire floor area. The floor outlet shall not permit a flow of water greater than two feet per second through the grating and the slotted openings in the grate shall not be over 1/2 inch wide.

Where outlet fittings consist of parallel plates of an anti-vortex type fitting where the water enters the fitting from the sides, entrance velocities may be increased to six feet per second.

SECTION 7

FILTRATION

7.1 General — Suspended matter in pool water shall be removed by means of adequate filtration equipment designed and operated as provided herein. All filters shall be of corrosion-resistant material. Sufficient filtering area shall be provided to meet the design criteria specified in Section 6.1.

7.2 Sand or Anthracite Filters — Where sand filters are proposed, at least two such filters connected in parallel shall be provided. Filter media shall consist of sand or anthracite with filter gravel or quartz supporting the filter bed. The effective size of the filter media shall be 0.45–0.55 mm with a uniformity coefficient not greater than 1.75, and free of clay, organic and soluble matter. The effective depth of filter media shall not be less than 20 inches. The total depth of each filter bed shall be at least 36 inches.

The rate of filtration shall not be greater than three gallons per minute per square foot of effective filter surface

area. The minimum rate of backwash shall be 12 gallons per minute per square foot of filter area for sand; eight gallons per minute per square foot of filter area for anthracite.

The amount of freeboard to overflow troughs or pipes shall be at least one-half the depth of filter sand. Underdrains shall be designed to obtain uniform flow when either washing or filtering.

7.3 Pressure Sand Filters — The type and depth of filter media and the rate of filtration for pressure sand filters shall be the same as required for sand filters in Section 7.2.

7.4 Chemical Application — Devices with reasonably accurate dosage control features shall be provided for adding coagulants ahead of the filters.

7.5 Diatomaceous Earth Filters — These filters may be either of the pressure or vacuum type.

(a) **Pressure** — The design filter rate shall not exceed two gallons per minute per square foot of effective filter area. With slurry feed, the rate shall not exceed two and a half gallons.

(b) **Vacuum** — The same design criteria applicable to pressure equipment shall apply.

7.6 Other Filters — Other filters may be considered under the provisions of Section 2.4 of this Code. Higher rate filters may be accepted, provided the units have the National Sanitation Foundation seal of approval.

7.7 Gauges — Loss-of-head gauges shall be installed on all open sand filters. Pressure gauges shall be installed on the inlet and outlet pipe of pressure filters. Such gauges shall be at least six inches in diameter and readable to one pound pressure. Gauges to be read in pairs shall be set at the same elevation.

7.8 Flow Meters — Rate of flow meters shall be installed and located so that both the rate of recirculation and backwashing will be registered in gallons per minute. Meters shall be installed on a straight length of pipe at a distance from any valve, elbow or other source of turbulence equal to at least six times the diameter of the pipe. This requirement may be waived for meters not affected by pipeline turbulence.

7.9 Sight Glasses — Pressure filters shall be provided with sight glasses installed on the waste discharge line in order that filter washing progress may be determined. Such sight glasses shall be readily removable for cleaning purposes.

7.10 Air Relief Valves — Each pressure filter shall be equipped with an air relief valve at or near the high point and located as to be readily accessible.

7.11 Headroom — Pressure filters shall be designed, located and constructed to permit removal of filter heads for inspection, replacement or repair of the filter elements or media.

7.12 Sump — A sump shall be provided to receive filter backwash water. There shall be an air gap not less than six inches between the discharge pipe opening and the overflow level of the sump.

SECTION 8 DISINFECTION

8.1 Disinfecting Agents — Means shall be provided

for continuous and effective disinfection of swimming pool waters so as to result in compliance with the bacterial quality standards established in Section 15.5 of this Code.

8.2 Gas Chlorination — Gas chlorinating devices shall be of the solution feed type. The chlorinator and cylinders of chlorine shall be housed in a reasonably gastight corrosion-resistant and mechanically vented enclosure. When located below grade, airtight ducts from the bottom of the enclosure, provided with a motor driven exhaust fan capable of producing at least one air change per minute to atmosphere, shall be provided. Automatic louvers of good design located near the top of the enclosure for admitting fresh air are required. Electrical switches for control of artificial lighting and ventilation shall be on the outside of the enclosure adjacent to the door. A gas mask, of the type approved by the United States Bureau of Mines, shall be provided and kept in an unlocked cabinet located outside the enclosure adjacent to the entrance door to the enclosure.

The chlorinating unit shall be capable of supplying at least one pound of chlorine per eight hours for each 10,000 gallons of swimming pool capacity. Scales shall be provided for determining the loss of weight of chlorine gas.

A valve stem wrench shall be maintained on the chlorine cylinder or cylinders in use so the supply can be shut off quickly in case of an emergency. Valve protection hoods shall be kept in place except when the chlorine cylinders are in use.

8.3 Hypofeeder — When a hypochlorite solution is to be fed through hypofeeding equipment, such equipment shall provide the following features:

(a) Feed shall be positive under all conditions of pressure in the circulating system, without artificial constriction of the pump suction line whether this line is under vacuum or pressure head.

(b) Means for regulation shall be provided to insure constant feed with varying supply or back pressure.

(c) Positive features to prevent backflow from recirculation system to the solution container, and provision for reducing to a minimum the entry into swimming pool of inert material released from calcium hypochlorite.

(d) Provision to prevent siphoning of hypochlorite solution when the recirculation pump and hypochlorinator are both turned off (applicable to above swimming pool level installations only).

The addition of ammonia to chlorine solutions for the purpose of forming chloramines as the disinfecting agent shall not be allowed without special permission of the Administrative Authority or its authorized agent.

8.4 Bromination — Brominators, when provided, shall have capacities of at least two pounds of bromine per day for each 10,000 gallons of pool volume. Brominator equipment rooms shall be constructed and ventilated as required in Section 8.2.

8.5 Other Disinfecting Agents — The Administrative Authority may accept other disinfecting materials or methods when they have been adequately demonstrated to provide a satisfactory residual effect which is easily measured and equally as effective in conditions of use as the chlorine concentration specified herein, and not be dangerous to public health, create objectionable physiological effects, or impart toxic properties to the water.

SECTION 9

WASTEWATER DISPOSAL

9.1 General — The system for wastewater disposal shall be adequate to serve the facility, including bathhouse, locker room, and related accommodations. Sanitary sewage and filter backwash waters shall be disposed of without creating nuisances or sources of foulness.

9.2 Sanitary Sewer — The installation of individual sewage disposal systems or other means of private sewage disposal shall not be approved if a sanitary sewer is available within 100 feet.

9.3 Filter Backwash — The discharge of filter backwash into the waters of the State shall not be permitted unless treatment of such wastewaters shall first be provided. The treatment shall be of such character as to produce an effluent which will not result in the creation of conditions in the receiving stream violating the criteria established by the State Department of Health for the classification assigned thereto.

9.4 Subsurface Sewage Disposal Facilities — The location, construction, use and maintenance of subsurface disposal systems shall comply with the applicable provisions of either the Administrative Authority's current ordinance and regulations or provisions of the current edition of the Standards for the Construction of Sewerage Facilities for Realty Improvements promulgated by the New Jersey State Department of Health pursuant to the provisions of Chapter 199, P.L. 1954.

9.5 Plumbing — The installation, maintenance, repair and control of plumbing facilities shall comply with the applicable provisions of the Administrative Authority's current ordinance and regulations or provisions of the Plumbing Code of New Jersey, current edition, whichever prescribes higher standards.

SECTION 10

DRESSING ROOMS AND BATHHOUSES

10.1 Layout — Dressing rooms or bathhouses to be used simultaneously by both sexes shall be entirely separated by partitions. Line of sight shall be broken at entrance and exits or dressing rooms.

10.2 Floors — Floors of all dressing and locker rooms shall be constructed of smooth, finished material impervious to moisture. Wood slats on floors shall not be permitted. Floors shall have sufficient pitch and otherwise be constructed so as to permit proper drainage after washing down. Walk areas used by patrons shall be of nonslip construction.

10.3 Walls and Partitions — Walls and partitions of all dressing rooms and bathhouses shall be of smooth, impervious material. If walls of wood or other similar material are used, all cracks and joints shall be filled and the surface kept finished with paint or other sanitary water-proof coating. Partitions shall terminate a sufficient distance above the floor to permit flushing of the entire floor area.

10.4 Furniture and Lockers — All furniture used in dressing rooms shall be of simple character and easily cleaned. Lockers, where provided, shall be properly ventilated and be of vermin-proof construction with tight joints.

10.5 Ventilation — Dressing rooms or bathhouses shall be constructed to provide ventilation at floor and ceiling levels.

SECTION 11

SHOWERS

11.1 Number — The following minimum number of showers shall be required based upon the number of lockers, baskets, or other clothing storage accommodation provided.

| Lockers or Baskets | Showers | |
|--------------------|---|---|
| | Male | Female |
| Less than 100 | 1 | 1 |
| 100 - 200 | 2 | 2 |
| 200 - 500 | 3 | 3 |
| 500 - 1000 | 4 | 5 |
| Over 1000 | Add 1 for every 500 lockers in excess of 1000 | Add 1 for every 300 lockers in excess of 1000 |

11.2 Type — Manually operated shower valves shall be provided to insure a satisfactory mixture of hot and cold water without danger of scalding. Chain pulls shall not be permitted for hot water showers. Showers shall be fitted with nonremovable fixed spray heads. Hot or warm water shall be provided for indoor showers.

11.3 Flooring — Raised curbs or raised sills shall not be permitted between showers and walkways or at the entrance to shower stalls. Shower stall floors located adjacent to walkways shall be depressed below the level of the walkways. Floor drains shall be provided in the shower rooms or stalls and shall be at least twice the cross sectional area of the outlet pipe. Wood slats or floor material and slopes conducive to slipping shall not be permitted.

11.4 Soap — Soap shall be readily accessible adjacent to each shower.

SECTION 12

TOILETS AND LAVATORIES

12.1 Number — Swimming pools shall be equipped with the following minimum facilities based upon the number of lockers, baskets or other clothing storage accommodations provided:

| Lockers or Baskets | Water Closets | | | Lavatories | |
|--------------------|---|---|---|---|---|
| | Male | Female | Urinals | Male | Female |
| Less than 100 | 1 | 1 | 1 | 1 | 1 |
| 100 - 200 | 2 | 2 | 2 | 2 | 2 |
| 200 - 500 | 3 | 3 | 2 | 3 | 3 |
| 500 - 1000 | 4 | 5 | 3 | 3 | 3 |
| Over 1000 | Add 1 for every 500 lockers in excess of 1000 | Add 1 for every 500 lockers in excess of 1000 | Add 1 for every 500 lockers in excess of 1000 | Add 1 for every 500 lockers in excess of 1000 | Add 1 for every 500 lockers in excess of 1000 |

12.2 Type — Toilets shall be of the flush type and constructed of vitreous china. Urinals shall be constructed so as to prevent splashing. Lavatories shall be of vitreous

china and shall be equipped with tamper proof spring valve controls.

12.3 Stalls — Toilets stalls shall be enclosed with noncorrosive partitions. There shall be sufficient space between the floor and walls to permit washing. Doors, when provided, shall swing inward.

SECTION 13

EMERGENCY EQUIPMENT

13.1 Rescue Equipment — Swimming pools shall be equipped with at least two (2) poles or shepherd's crooks. There shall also be provided at least two (2) life rings at least 14 inches in diameter with a sufficient length of ¼ inch line firmly attached to each ring. Such equipment shall be properly stored and readily accessible.

13.2 Emergency Equipment — A minimum of first aid equipment listed below shall be properly stored and readily available at all times when a pool is open for use.

- Aromatic ammonia
- Tincture of iodine or equivalent
- Individually compressed sterile gauze
- Absorbent cotton
- Adhesive tape
- Bandages of various widths
- Rubbing alcohol

At least one person capable of administering first aid shall be in attendance at all times when the pool is open for use.

SECTION 14

SUPERVISION AND MAINTENANCE

14.1 General — Swimming pools, when open for use shall, at all times, be under the supervision of a competent director who shall be responsible for all phases of pool operation including the applicable provisions of this Code.

14.2 Lifeguards — At least one (1) senior lifeguard shall be on duty at all times who holds as a minimum, a valid Senior Lifeguard Certificate issued by the American Red Cross, Y.M.C.A. or other equivalent rating. Other lifeguards required to be present and on duty while the pool is open for business shall be based primarily upon the number of patrons present at any time.

As a guide, there should be at least one (1) lifeguard for every 150 patrons in attendance at a pool. All persons acting as lifeguards shall be capable swimmers proficient in lifesaving and artificial respiration procedures. All lifeguards shall be so identified by distinguishing apparel, emblems or signs.

14.3 Lifeguard Platform — Swimming Pools operated primarily for unorganized use and having an area of more than 2,250 square feet of water surface shall be provided with at least one elevated lifeguard platform or chair located so as to provide a clear unobstructed view of the pool bottom.

14.4 Personal Regulations — Personal regulations covering admission, bathing and conduct of patrons shall be conspicuously posted and shall include the following:

(a) Any person showing evidence of skin disease, sore or inflamed eyes, cold, nasal or ear discharges or any communicable disease shall be refused admission.

(b) Persons with excessive sunburn, open blisters, cuts or bandages shall be refused admission.

(c) No dogs or other animals shall be allowed in the pool area, dressing rooms or other parts of the pool enclosure.

(d) Preferably no food and drink shall be used or consumed within the pool enclosure. Where food and drinks are permitted, no containers of glass shall be used.

(e) Persons in street shoes or other spectators should not be permitted in the pool area.

(f) Unnecessary expectoration, spouting of water, roughness, rowdiness or other conduct affecting the safety and comfort of others shall not be permitted.

14.5 Suits and Towels — Bathing suits or towels rented or otherwise furnished by the pool management shall be laundered after each use with a detergent and hot water, thoroughly rinsed and dried before reuse. Clean suits and towels shall be stored separately from those unlaundered, and shall not be issued from the same counter to which used suits or towels are returned.

14.6 Maintenance — All dressing rooms, toilets, showers, pool proper and surroundings shall be kept clean and orderly at all times. A suitable disinfectant shall be used daily on floors, walls, mats and other interior portions of dressing rooms. Toilets, lavatories and shower rooms shall be cleaned with a detergent and water, disinfected daily and kept in good repair. Toilets shall be kept supplied with sufficient amount of toilet tissue. Lavatories shall be supplied with soap and suitable receptacles for disposal of paper towels. Common towels shall not be permitted.

14.7 Chemicals — All pool chemicals shall be handled, stored and used in strict accordance with manufacturers instructions. A separate storage room or closet shall be provided for these chemicals.

SECTION 15

BATHING WATER QUALITY

15.1 Analysis — All chemical and bacteriological analyses of swimming pool waters shall be made in accordance with the procedures set forth in the latest edition of "Standard Methods for the Examination of Water and Wastewater," published jointly by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation.

Either the multiple tube fermentation or the membrane filter technique shall be used.

15.2 Procedure — Swimming pool operators shall have pool water samples analyzed by a laboratory approved by the Administrative Authority unless otherwise directed by the Administrative Authority or its authorized agent.

Reports of all analyses shall be forwarded to the Administrative Authority or its authorized agent within 48 hours after completion.

15.3 Frequency — Samples shall be collected at least once weekly at each end of the pool during period of heavy bathing load.

15.4 Bacterial Quality Standards — For the purpose of this Code, the bacterial quality of swimming pool waters shall be judged on the basis of coliform densities determined by either the multiple tube fermentation technique or the membrane filter test procedure.

(a) The Multiple Tube Fermentation Technique

(1) **Standard Sampling** — For the purpose of this Code, a standard sampling shall consist of the ten (10) standard portions obtained from the two (2) samples taken from the pool in accordance with Section 15.3.

(2) **Maximum Coliform Densities** — Of all ten (10) standard portions obtained from a standard sampling, not more than one (1) portion shall show the presence of organisms of the coliform group at any time.

(b) **Membrane Filter Test**

(1) **Standard Sample** — A standard sample of pool water shall consist of 100 milliliters (100 ml.).

(2) **Standard Sampling** — For the purpose of this Code, a standard sampling shall consist of two standard samples taken from the pool in accordance with Section 15.3.

(3) **Maximum Coliform Densities** — The number of coliform organisms present shall not be more than 1.0 per standard sample (100 ml.).

15.5 Samples Not Meeting Standards — The Administrative Authority or its authorized agent shall obtain and have additional samples analyzed if those taken pursuant to Section 15.2 do not meet standards established by Section 15.4.

15.6 Chemical Quality — Free chlorine residuals and pH values shall be determined not less than four times

during any day the pool is in operation. Free chlorine residuals and pH values shall be maintained within the following ranges:

| pH | Free Chlorine Residual |
|-----------|------------------------|
| 7.2 - 8.2 | At least .4 ppm |

If other swimming pool water disinfectants are used, residuals of equivalent disinfecting strength shall be maintained whenever the pool is open or in use.

Comparators for measuring disinfectant residuals and pH shall be provided.

15.8 Physical Quality — The water of a pool, when in use, shall be sufficiently clear to permit a black disk six inches in diameter superimposed upon a white field placed at the bottom of the deepest end of the pool to be clearly visible from the pool sidewalk at all distances up to ten yards measured in a horizontal distance from the projection of the disk onto the pool surface.

SECTION 16

NUISANCE DEFINED

16.1 General — A swimming pool constructed, altered or operated in violation of the provisions of this Code is hereby declared to be a nuisance and detrimental to public health.