OPERATIONAL GUIDE 2015



swimming pools 4 spas



Public Health Environmental Health Services

RECREATIONAL HEALTH POOLS & SPAS

INSPECTION GUIDE - 2015

The following document is a compilation of information and material pertaining to inspections of recreational health facilities in San Bernardino County. It is designed to serve as a quick reference only.



TABLE OF CONTENTS

RECREATIONAL HEALTH REGULATION	3
IMPORTANCE OF POOL SAFETY	4
UNDERSTANDING DISINFECTANT	5
REQUIRED DISINFECTANT LEVELS	6
TEST KITS	7
"SHOCKING" THE POOL	8
USING "STABILIZER"	9
TOTAL ALKALINITY	10
UNDERSTANDING pH	11
CALCIUM	12
TOTAL DISSOLVED SOLIDS	13
ALGAE	13
ANTI-ENTRAPMENT	14
DRAIN COVER EXPIRATION	15
SAFETY VACUUM RELEASE SYSTEMS	16
SAFETY SIGN REQUIREMENTS	17
WATER DEPTH AND SAFETY MARKERS	18
POOL/SPA ENCLOSURE	19
ENCLOSURE DIAGRAMS	20
GATES AND DOORS	21
SAFETY AND FIRST AID EQUIPMENT	22
BACTERIOLOGICAL QUALITY STANDARDS	23
INDOOR AIR QUALITY STANDARDS	24
RECIRCULATION SYSTEM EQUIPMENT	25
WATER CIRCUI ATION	27

SKIMMERS	28
TURNOVER TIME	29
TYPES OF INSPECTIONS	30
INSPECTION PROCESS	31
REASONS FOR CLOSURE	33
AVOIDING CLOSURE	33
VIOLATION USAGE	34
UNDERSTANDING INSPECTION SCORES	34
COMPLIANCE SELF-CHECKLIST	35
DIVISION OF ENVIRONMENTAL HEALTH SERVICES CONTACT INFORMATION	_
	37



RECREATIONAL HEALTH REGULATION



REGULATION

Swimming pool regulations and codes are developed by government agencies to make sure that recirculated recreational water facilities (for example, pools, hot tubs, and water parks) provide a clean, healthy, and safe environment for the public. These regulations set minimum standards (such as the amount of chlorine that should be in the pool) to decrease the public's risk of illness and injury. State and local officials regularly inspect recirculated recreational water venues to ensure that these regulations are followed. (Centers for Disease Control and Prevention)

Recreational health facilities in San Bernardino County, including all public swimming pools and spa pools, are inspected for health and safety. Inspections are conducted by inspectors with Division of Environmental Health Services (DEHS). Official inspection reports are issued to pool owners/operators following each inspection.

IMPORTANCE OF POOL SAFETY

According to the Centers for Disease Control and Prevention, approximately 10 people die per day by drowning in the United States. One out of every five people that drown is younger than 15 years of age. Moreover, the highest drowning rate of children is from 1 to 4 years of age. In most cases, these drowings can be prevented through proper training and supervision.



Risk factors for drowning include:

- Lack of swimming ability
- Lack of barriers
- Lack of close supervision
- Location of the pool (home vs. public)
- Failure to wear life jackets
- Alcohol use
- Seizure disorders

UNDERSTANDING DISINFECTANT

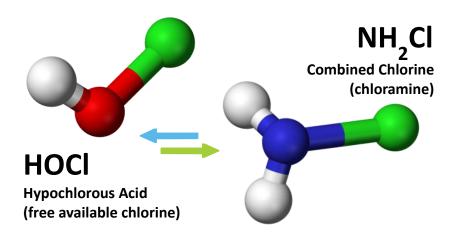
TYPES OF DISINFECTANT

Although there are several types of disinfectant, such as chlorine, bromine, ozone, and ultraviolet (UV) light, the most common form of disinfectant used in swimming pools today is chlorine. It is important to understand how disinfectant works in order to manage disinfectant levels properly.

When referring to chlorine as a disinfectant, it is usually the free available chlorine level that is of importance (hypochlorous acid). Total chlorine refers to a combination of "free available chlorine" and "combined chlorine." While both forms of chlorine act as a disinfectant, combined chlorine is not as effective as free available chlorine at killing bacteria.

MODE OF ACTION

Free available chlorine reacts to form "combined chlorine" when it comes into contact with organic material in the water. Bacteria are killed and contaminants are broken down through the process of oxidation.



REQUIRED DISINFECTANT LEVELS

Section 65529

The following table shows the required minimum and maximum concentrations of disinfectant:

	I	FREE-CHLORII	NE RESIDUA	L	BROM	BROMINE	
	WITHO	OUT CYA	WITH CYA		RESID	RESIDUAL	
	Min	Max	Min	Max	Min	Max	
Public Pools*	1.0 ppm	10.0 ppm	2.0 ppm	10.0 ppm	2.0 ppm		
Public Spas, Wading Pools, and Spray Grounds	3.0 ppm	10.0 ppm	3.0 ppm	10.0 ppm	4.0 ppm		

CYA = cyanuric acid; Min = minimum; Max= maximum; ppm= parts per million.

In addition to the requirements above, a spray ground and water features with an ultraviolet light disinfection system shall be disinfected continuously at a minimum of 40 mJ/cm² by the ultraviolet light disinfection units while the spray ground and water features are in use. If the ultraviolet dosage rate drops below 40 mJ/cm² the operator shall close the spray ground and water features.

The pool operator shall maintain a test kit for measuring the disinfectant residual, pH, and, if used, cyanuric acid concentration at the public pool. This test kit shall be available for use by the pool operator and the enforcing agent at all times the public pool is in use. The chlorine or bromine test kit shall be the diethyl-p-phenylenediamine (DPD) type or otherwise be capable of testing free-halogen residual. Chlorine test kits shall be capable of testing for free chlorine and total chlorine, such that combined chlorine concentrations can be determined.

^{*}This includes all public pools except spas, wading pools, and spray grounds.

TEST KITS

Section 65529

The pool operator shall maintain a test kit for measuring the disinfectant residual, pH, and, if used, cyanuric acid concentration at the public pool. This test kit shall be available for use by the pool operator and the enforcing agent at all times the public pool is in use. The chlorine or bromine test kit shall be the diethyl-phenylenediamine (DPD) type or otherwise be capable of testing free-halogen residual. Chlorine test kits shall be capable of testing for free chlorine and total chlorine, such that combined chlorine concentrations can be determined.



Recommendation: Test kit should be capable of measuring disinfectant levels at or above the maximum permissible limit (i.e. 10 ppm free available chlorine).

"SHOCKING" THE POOL

UNDERSTANDING THE MEANING OF "SHOCKING"

"Shocking" the pool is a way to help reduce the level of contaminants in the water when the action of the disinfectant lags behind. Two things begin to occur when the action of the disinfectant starts lagging. First, oxygen molecules tend to attach to organic food sources rather than bacteria. Second, while oxygen molecules are attaching to organic food sources, bacteria are able to multiply and thus lead to a bacteria "bloom."

"Shocking" a pool will help the disinfectant catch up on its work load. There are two main categories of "shock":

- 1. Chlorine "shock"
 - Involves raising the chlorine to a high level
 - Enough oxidation is provided to dissolve organics
- 2. Non-chlorine "shock"
 - Potassium monopersulfate is used to oxidize contaminants
 - Bacteria is not killed directly by the potassium monopersulfate

WHEN TO "SHOCK" THE POOL

DEHS does not regulate how often a pool must be shocked. However, it may be necessary to "shock" the pool water after:

- "Combined chlorine" level reaches 0.4 ppm
- Heavy use of the pool by bathers
- Heavy rain
- Wind blowing debris into the pool
- Changing pool water

USING "STABILIZER"

Cyanuric acid, otherwise known as a "stabilizer" or "conditioner," helps to stabilize chlorine from UV rays in sunlight by forming weak bonds with free available chlorine. As a stabilizer, cyanuric acid helps prevent chlorine levels from degrading quickly. However, there is a drawback to using cyanuric acid as a stabilizer. The efficiency of chlorine is reduced with high cyanuric acid levels (above 50 ppm). Furthermore, the amount of time it takes to kill bacteria lengthens as the concentration of cyanuric acid increases. Cyanuric acid is residual and will remain in the pool water and accumulate over time as more cyanuric acid is added. Cyanuric acid concentrations that are too high will render the free available chlorine ineffective. The concentration of cyanuric acid must not exceed 100 ppm. The best way to lower the concentration of cyanuric acid is to replace the pool water with fresh water.

Cyanuric acid may be sold separately or combined with other products such as chlorine tablets (Dichlor, Trichlor). Using cyanuric acid in indoor pools and spas is unnecessary and can lead to high levels if the water is not changed regularly.



TOTAL ALKALINITY

REGULATION

Although not regulated by DEHS, it is important to monitor the total alkalinity in order to properly balance pool chemical levels and prevent other problems.

Total alkalinity is a measurement of alkaline substances (i.e. bicarbonate content) in the water. Alkaline substances act as a buffer against rapid fluctuations in pH ("pH bounce"). Total alkalinity can be adjusted by adding chemicals to the water such as sodium bisulfate or muriatic acid. Ideal total alkalinity is between 80 to 120 ppm (recommended). When adjusting the total alkalinity by adding sodium bisulfate or muriatic acid, it is important to recheck the total alkalinity 6 hours afterward.

EFFECTS OF LOW OR HIGH ALKALINITY

LOW ALKALINITY	HIGH ALKALINITY
"pH Bounce"	pH Lock
Plaster Etching	Burning Eyes
Staining	Itchy Skin
Green Water	Disinfectant Inefficiency
Eye and Skin Irritation	Algae Growth

UNDERSTANDING pH

A measurement of the concentration of acid or alkaline materials in the water is known as the pH. It is measured on a scale from 0 to 14 with 7 considered neutral. DEHS inspectors will check the pH level of the pool water during the inspection to ensure it is maintained between 7.2 and 8.0. It is important to



ensure that the pH is maintained at a level that will not cause eye or skin irritation since bathers will be in contact with the pool water. Likewise, it is important to maintain the pH at a level that will not hinder the disinfection process. Always adjust the total alkalinity of the pool water prior to adjusting pH.

Corrosive	Ideal	Scale-Forming
<7.0	7.4 to 7.6	>8.0
Acidic	Balanced	Alkaline

EFFECTS OF LOW OR HIGH pH

ACIDIC (CORROSIVE)	ALKALINE (SCALE-FORMING)
Equipment Corrosion	Scale Formation
Etching of Plaster	Cloudy Water
Eye and Skin Irritation	Inefficient Sanitizer
Excessive Sanitizer Use	Eye and Skin Irritation

CALCIUM

Pool water needs calcium and other minerals. Although DEHS inspectors will not check calcium levels, it is essential to maintain the proper balance of calcium in the pool water. Pool water will seek calcium from any available source if the calcium level is too low. The easiest source of calcium is usually the plaster coat on the pool shell. Failing to maintain proper calcium levels is the leading cause of plaster failure and premature resurfacing. If necessary, calcium hardness can be increased by adding calcium chloride to the pool water. Calcium chloride should be dissolved in a bucket of water before adding it to the pool.

TOTAL HARDNESS

Total hardness is the amount of calcium or magnesium in the water. Total hardness will not be checked by the DEHS inspector. However, high total hardness can result in scale formation causing pool filters or plumbing to clog and water to appear cloudy. If necessary, total hardness can be lowered by partially draining the hard water and adding soft water. Ideal total hardness is between 200 and 400 ppm (recommended).

SCALE FORMATION

Scale formations are white deposits of calcium that are found on pool surfaces. Scale formations may indicate high pH, total chlorine, or high/low calcium hardness. Scale formation can lead to reduced flow rates by building up in pipes. Maintaining proper pH and total alkalinity will help prevent scale formation.



TOTAL DISSOLVED SOLIDS

Total dissolved solids (TDS) refer to a measurement of all substances dissolved in the water. TDS includes chemicals, organic compounds, pollution, and debris. It is usually measured with a conductivity meter. However, DEHS inspectors will not test for TDS during inspections. The maximum level of TDS should not exceed 1500 ppm over start-up (recommended). If necessary, TDS can be lowered by partially draining water and adding fresh water.

ALGAE

Algae are microscopic plants that obtain nutrients from leaves, plants and organic matter. Contributors to algae growth include:

- Lack of disinfectant
- Poor or inadequate filtration/circulation
- Improper pH levels
- Excessive cyanuric acid (stabilizer) levels

Algae growth is usually treated with algaecide and/or shock treatment.



ANTI-ENTRAPMENT

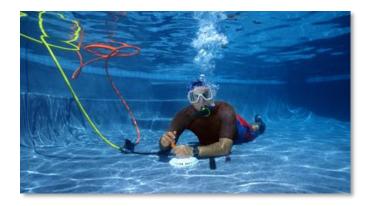
Section 3162B

Public swimming pools built prior to January 1, 2010, with a single main drain that is not unblockable shall be equipped with at least one more safety device to prevent physical entrapment (i.e. Safety Vacuum Release System).

Public swimming pools constructed on or after January 1, 2010, shall have at least two main drains per pump that are hydraulically balanced and symmetrically plumbed through one or more "T" fittings. Drain covers shall comply with the applicable ASME/ANSI performance standard and be replaced upon expiration.



DRAIN COVER EXPIRATION



Drain cover manufacturers are required to state a life span for each cover and, while some are as short as three years, the majority expire in five and seven years.

When replacing the covers, professionals should take certain measures, both technical and administrative. First, make sure you choose the right cover. It should be tested and certified for the flow rate that the pump can produce on the installation.

Always install new drain covers in accordance with the manufacturer's design and instruction. Do not reuse the old screws, but use those that come with the new product. Since the passage of VGB (Virginia Graeme Baker Act), there has already been at least one entrapment involving a compliant cover that was installed with the wrong screws. While power tools can be used for pulling screws out, they should not be used for tightening, because they can strip the threads easily.

It is your responsibility as a pool operator to make sure no expired drain covers are in use. Set up a filing system to keep track of drain cover expiration dates and all related work. It is important that this information be readily available to employees working onsite as well as the health inspector. Ensure that this information will not be lost if your management team changes.

SAFETY VACUUM RELEASE SYSTEMS

Section 3162B

The following are examples of safety vacuum release systems that may have been installed on pools with a single main drain. Always consult DEHS plan check prior to installing any equipment. It may be necessary to submit plans for approval.







Vacless



Pentair Intelliflow



Stingl

SAFETY SIGN REQUIREMENTS

Section 3120B

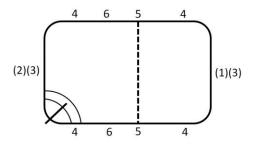
All signs shall have clearly legible letters or numbers not less than 4 inches high, unless otherwise required, affixed to a wall, pole, gate or similar permanent structure in a location visible to all pool users. The following shall be posted:

- Maximum number of pool users permitted for each pool. (Pool: 1 person per 20 square feet surface area; Spa: 1 person per 10 square feet surface area)
- "NO DIVING" at pools with a maximum water depth of 6 feet or less.
- Where no lifeguard service is provided, a warning sign shall be posted stating, "WARNING: NO LIFEGUARD ON DUTY." The sign also shall state in letters at least 1 inch high, "Children under the age of 14 shall not use pool without a parent or adult guardian in attendance."
- An illustrated diagram with text at least 1/4 inch high of artificial respiration and CPR procedures.
- The emergency telephone number 911 (minimum 4 inches high), the number of the nearest emergency services and the name and street address of the pool facility (minimum 1 inch high).
- A warning sign for spa pools with "CAUTION" language.
- Where pools were constructed for which lighting was not required, a sign shall be posted at each pool entrance on the outside of the gate(s) stating, "NO USE OF POOL ALLOWED AFTER DARK."
- A sign shall be posted on the exterior side of gates and doors leading into the pool enclosure area stating, "KEEP GATE or DOOR CLOSED."
- A sign in letters at least 1 inch high and in a language or diagram
 that is clearly stated shall be posted at the entrance area of a
 public pool which states that persons having currently active
 diarrhea or who have had active diarrhea within the previous 14
 days shall not be allowed to enter the pool water.
- A sign in letters at least 1 inch (25 mm) high shall be posted that describes the requirements for wave pools.
- A sign shall be posted at each spray ground and be visible from any part of the spray ground that states, "CAUTION: WATER IS RECIRCULATED. DO NOT DRINK."

WATER DEPTH AND SAFETY MARKERS

Section 3110B.4

Water depth and safety markers should be clearly visible and in good repair. Required depth marker locations are shown in the following diagram:



DEPTH MARKER LOCATIONS

- 1. Maximum depth; and
- 2. Minimum depth; and
- 3. Each end; and
- 4. Both sides at each end; and
- 5. At the break in the bottom slope between the shallow and deep portions of the pool (see also Section 3109B.3); and
- 6. Along the perimeter of the pool at distances not to exceed 25 feet (7620 mm).

Exception: A spa or wading pool shall have a minimum of two depth markers indicating the maximum depth.

For pool water depths 6 feet (1830 mm) and shallower no diving markers with the universal symbol of no diving, which is a red circle with a slash through it superimposed over the image of a diver, shall be installed on the deck directly adjacent to the depth markers



POOL/SPA ENCLOSURE

Section 3119B

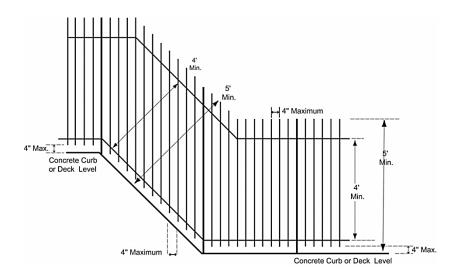
The pool shall be enclosed by one or a combination of the following: a fence, portion of a building, wall, or other approved durable enclosure. Doors, windows, gates of living units or associated private premises shall not be permitted as part of the pool enclosure. The enclosure, doors and gates shall meet all of the following specifications:

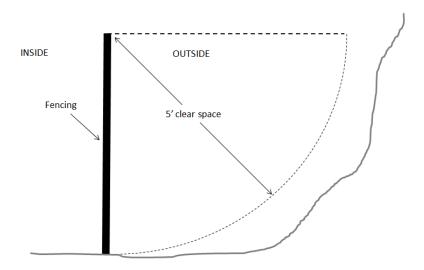
- 1. The enclosure shall have a minimum effective perpendicular height of 5 feet (1524 mm) as measured from the outside as depicted in Figure 31B-4; and
- Openings, holes or gaps in the enclosure, doors and/or gates shall not allow the passage of a 4-inch (102 mm) diameter sphere. The enclosure shall be constructed over a hard and permanent material equivalent to concrete; and
- 3. The enclosure shall be designed and constructed so that it cannot be readily climbed by small children. Horizontal and diagonal member designs which might serve as a ladder for small children are prohibited. Horizontal members shall be spaced at least 48 inches (1219 mm) apart. No planters or other structures that can be climbed shall be permitted within 5 feet (1524 mm) of the outside of the pool enclosure or within a 5 foot (1524 mm) arc as depicted in Figure 31B-5. The area 5 feet (1524 mm) outside of the pool enclosure shall be a common area open to the public; and
- 4. Chain link may be used, provided that the openings are not greater than 1 ¾ inches (44 mm) measured horizontally.

See enclosure diagrams on the following page.

ENCLOSURE DIAGRAMS

Figures 31B-4 and 31B-5





No climbable structures are allowed within a 5-foot arc. The area outside the enclosure must be a common area open to the public

GATES AND DOORS

Section 3119B

Gates and doors opening into the pool enclosure also shall meet the following specifications:

- Gates and doors shall be equipped with self-closing and self-latching devices. The self-latching device shall keep the gate or door securely closed. Gates and doors shall open outwardly away from the pool except where otherwise prohibited by law. Hand activated door or gate opening hardware shall be located at a height no lower than 42 inches (1067 mm) but no higher than 44 inches (1179 mm) above the deck or walkway; and
- Gates and doors shall be capable of being locked during times when the pool is closed. Exit doors which comply with Chapter 10, Title 24, California Code of Regulations shall be considered as meeting these requirements; and
- 3. The pool enclosure shall have at least one means of egress without a key for emergency purposes. Unless all gates or doors are so equipped, those gates and/or doors which will allow egress without a key shall have a sign in letters at least 4 inches (102 mm) high stating EMERGENCY EXIT; and
- 4. The enclosure shall be constructed so that all persons will be required to pass through common pool enclosure gates or doors in order to gain access to the pool area. All gates and doors exiting the pool area shall open into a public area or a walkway accessible by all patrons of the pool.

SAFETY AND FIRST AID EQUIPMENT

Section 65540

Except for spray grounds without standing water, the pool operator shall ensure that the following safety and first aid equipment is provided and maintained readily visible and available for use at the public pool at all times:

- A 17-inch-minimum (exterior diameter) life ring with an attached throw rope with a minimum 3/16-inch diameter.
 The throw rope shall be of sufficient length to span the maximum width of the public pool and shall be stored in such a way as to prevent kinking or fouling. When rescue without a life ring can be effected from the perimeter of a spa, the enforcing agent may exempt the spa from the requirements of this subdivision.
- 2. A 12-foot-minimum fixed-length rescue pole with a permanently attached body hook. For spas, the enforcing agency may approve a shorter length based on the unique configuration of each spa. For spas, the length of the rescue pole shall be of sufficient length to effectuate rescue.

For public pools with lifeguard personnel on duty, the pool operator of each public pool area shall have the following additional safety equipment:

- A Red Cross 10-Person Industrial First Aid Kit or the equivalent.
- 2. An operating telephone.
- 3. A backboard and head immobilizer.

For public pools that exceed 75 feet in length or 50 feet in width, the pool operator shall provide a rescue pole and a life ring on at least two opposing sides of the public pool at centralized locations.

BACTERIOLOGICAL QUALITY STANDARDS

Section 65531

For pools without a recirculation and disinfection system, the pool operator shall test and maintain microbiological water quality standards in each public pool at the site as follows:

 Standard Plate Count (Heterotrophic Plate): The number of colony forming units (CFU) shall not exceed 200 colonies per milliliter.

Total Coliform:

- A) If the multiple-tube fermentation method is used, the most probable number (MPN) shall be less than 2.2 per 100 milliliters.
- B) If the membrane filtration technique is used, the number of coliform organisms shall be less than one colony per 100 milliliters.
- C) If an enzyme substrate method including Idexx Colilert-18 is used, an MPN shall be less than or equal to one per 100 milliliters.



Chemical quality of public pool water at the public pool site and ancillary facilities shall not cause adverse physiological effects, such as irritation of the eyes, lungs, or skin of the pool users.

INDOOR AIR QUALITY STANDARDS

Section 65531

Like chemical quality, indoor air quality at a public pool site and ancillary facilities shall not cause adverse physiological effects, such as irritation of the eyes, lungs, or skin of the pool users.

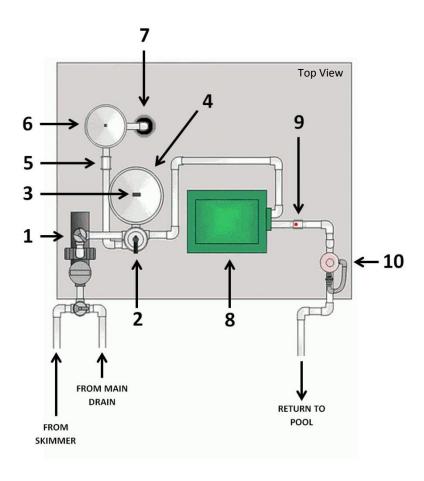
Pool users may experience eye, lung, or skin irritation if irritants, such as chloramines (combined chlorine), are allowed to accumulate in the water or air. This is particularly a concern at indoor swimming pools and spas. Pool operators must ensure that all indoor pool areas have adequate ventilation and proper air circulation. Furthermore, pool operators should test the pool water regularly to ensure that combined chlorine does not exceed 0.4 ppm.



RECIRCULATION SYSTEM EQUIPMENT

Section 3123B.1

Each pool shall be provided with a separate recirculation system designed for the continuous recirculation, filtration and disinfection of the pool water. The pumps, filters and all related parts of the pool water purification system shall be kept in operation whenever the pool is available for use. All parts of the pool and related pool facilities and equipment shall be maintained in good repair. See examples of the recirculation system components on the following page.



EXAMPLES OF EQUIPMENT



1. Recirculation Pump



3. Filter Pressure Gauge



5. Clear Sight Glass



7. Backwash drain pipe (air gap)



9. Flow Meter



2. Jandy Valve



4. Filter (DE as shown)



6. Separation Tank for DE filters



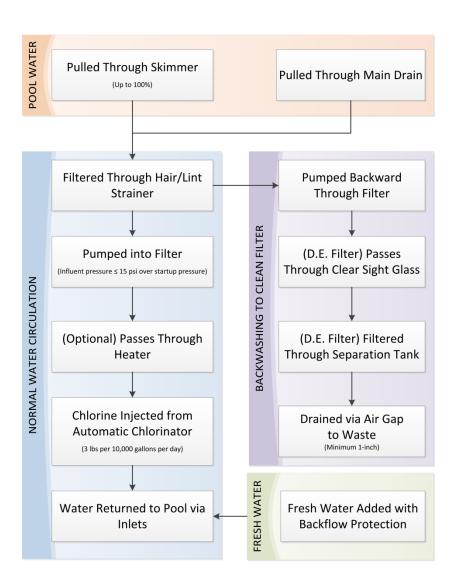
8. Heater (required for spas)



10. Automatic Chlorinator

WATER CIRCULATION

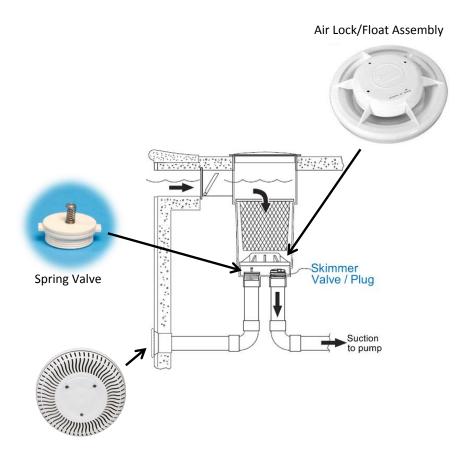
The flowchart below and the diagram on the following page show the typical recirculation process in a pool or spa pool. Recirculation pipes shall be labeled with the direction of flow.



SKIMMERS

Section 3136B

Skimmers and water levels shall be maintained and operated to remove floating scum, sputum or debris continuously. The skimmer shall be recessed into the pool wall, individually adjustable for the rate of flow with either an external or internal device, provided with an air lock protective device and provided with a removable and cleanable screen or basket to trap objects



Anti-Entrapment Cover

TURNOVER TIME

Section 3124B

Turnover time is defined as the maximum time allowed to circulate one complete volume of the pool water through the recirculation system. The recirculation system shall have the capacity to provide a complete turnover of pool water in:

- 1. One-half hour or less for a spa pool; and
- 2. One-half hour or less for a spray ground; and
- 3. One hour or less for a wading pool; and
- 4. Two hours or less for a medical pool; and
- 5. Six hours or less for all other types of public pools.



TYPES OF INSPECTIONS

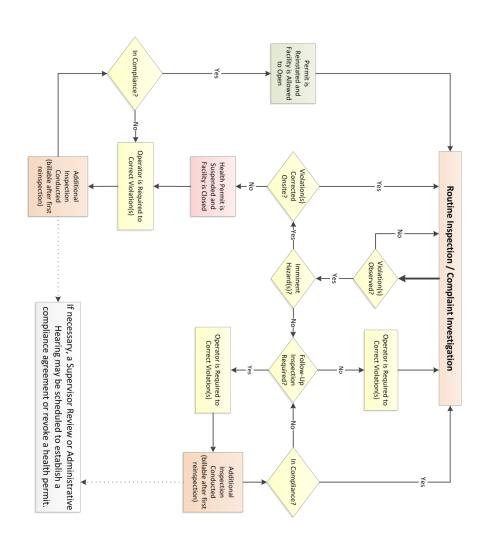
Routine Inspections are unannounced. The cost of these inspections is included in the health permit fee. The inspector will inspect the recreational health facility to determine compliance with applicable regulations. Deficiencies will be documented in an inspection report that is provided to the operator. All deficiencies shall be corrected within a reasonable amount of time. Violations that are serious and pose a hazard to bathers must be corrected before the inspector concludes the inspection. Failure to correct these serious violations will result in closure of the recreational health facility.

<u>Follow-up Inspections</u> or <u>Reinspections</u> may occur if the inspector needs to verify that a violation has been corrected. The cost of these inspections is factored into the total health permit fee. Recreational health facilities that were closed by the health inspector during a routine inspection will require a reinspection before the permit is reinstated and the facility is allowed to open.

Re-Reinspections are additional reinspections that are conducted to verify that a violation has been corrected if it was not observed corrected during the previous reinspection. Re-reinspections will be charged based on the current hourly rate for the amount of time required for the inspector to conduct the inspection. A separate invoice will be mailed to the accounts receivable mailing address for the recreational health facility.

Complaint Investigations are conducted in response to allegations regarding health or safety hazards. There is no additional charge to the recreational health facility permit holder if a complaint investigation is conducted. After receiving a complaint, the inspector will investigate to determine if the allegations are valid. If it is determined that a violation exists at the recreational facility, the operator will be instructed to correct the violation in the same manner as if a routine inspection was conducted. If the allegation cannot be validated, then no additional action will be required on the part of the recreational health facility. A report will be issued to the recreational health facility that includes a brief summary of the complaint, what the inspector observed, and if applicable, any corrective action required.

INSPECTION PROCESS



EFFECTIVE DATES OF CHANGES

Split main drain requirement for spas	1982
8 hour turnover rate changes to 6 hours	1982
Emergency shut-off switch (recirculation system only)	1982
Emergency shut-off switch (recirculation system & jets)	1985
Fencing changes from 4 to 5 feet in height	1994
Exemption for less than 4 ft. deck around courtyard pools	1994
Keyless egress	1994



REASONS FOR CLOSURE

A public spa/pool may be closed by this Division if it is being operated in a manner which creates an unhealthful, unsafe, or unsanitary condition, and will not be reopened until corrections are made. Pools and spas must meet all standards for clarity, disinfection, pH, safety, and bacteriology. The spa/pool will be closed if any of the following exist:



- No detectable disinfectant level (i.e. free chlorine)
- A free chlorine residual above 10.0 ppm
- A pH reading below 7.0 or above 8.0
- Poor water clarity (the main drain cover must be clearly visible from the pool deck)
- Main drain cover is loose, damaged, missing or is an entrapment/suction hazard
- Water temperature above 104°F (±2°F thermometer accuracy)
- Sharp objects or other unsafe or hazardous conditions in the pool enclosure area
- Electrical hazards
- Missing/Inoperative safety vacuum release system (if required)
- Fencing/Enclosure in disrepair
- Access gates and doors not self-closing and self-latching

AVOIDING CLOSURE

Pool owners and operators can avoid closure of their recreational health facilities by adhering to the following guidelines:

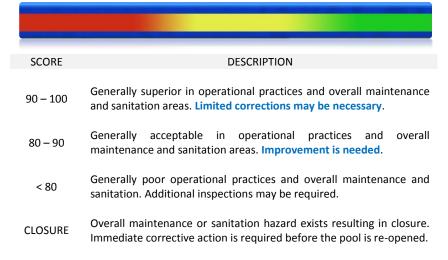
- 1. Test water chemistry daily and make necessary corrections.
- 2. Be proactive about maintenance and repairs rather than waiting for direction from DEHS.
- 3. Voluntarily close any pool or spa pool when safety hazards are discovered.
- 4. Make all necessary repairs and corrections in a timely manner.

VIOLATION USAGE

All violations observed during a routine inspection are considered critical or non-critical. If a critical violation is observed, it must be corrected onsite or the spa/pool shall be closed. All other violations shall be corrected within a reasonable amount of time. Violations are based on the California Health and Safety Code, California Code of Regulations, California Building Code, and the California Electrical Code.

UNDERSTANDING INSPECTION SCORES

Each inspection starts with a total of 100 points. Every violation that is marked "OUT" will deduct a corresponding number of points. Subtract the total deducted points from 100 to determine the overall score.



<u>Note</u>: Scores are intended to provide pool owners, operators, and bathers with a general understanding of the overall maintenance and sanitation of the recreational health facility. **Scores are never used to determine closure**.

Note: All areas of concern should be documented in the overall comment section at the end of the official inspection report.

COMPLIANCE SELF-CHECKLIST

Use the following compliance self-checklist to ensure your pool or spa is safe. Areas that are in compliance with current requirements should be marked "IN," while areas out of compliance (violations) should be marked "OUT." If one of the requirements highlighted in red is out of compliance, then the pool or spa should be closed until the violation is corrected.

WATER QUALITY	IN	OUT
Disinfectant maintained at approved level		
Pool water pH 7.2 to 7.8		
Bacteriological Conditions within limits (if required)		
Water clean and clear; bottom clearly visible		
Water temperature ≤ 104°F (spas)		
Cyanuric acid concentration ≤ 100 ppm		
SAFETY	IN	OUT
No unsafe or hazardous conditions		
No electrical hazards; GFCI installed and functional		
Emergency shut-off switch functional (spas)		
Safety signs posted and in good repair		
Emergency equipment accessible and in good repair		
First aid kit accessible and stocked (where applicable)		
Chemicals stored safely; used in accordance with manufacturer's directions		
ENCLOSURE	IN	OUT
Fencing/Enclosure maintained in good repair; no climbable surfaces		
Gates and doors self-closing and self-latching		
EQUIPMENT	IN	OUT
Recirculation pump in good repair		
Filter clean and in good repair		
Automatic disinfectant feeder functioning; appropriate size		
Skimmer and gutter systems in good repair; no part missing		
Flew meter and other gauges are accurate and functional		
let system operative (spas)	\Box	\Box

PLUMBING	IN	OUT
Recirculation system plumbing in good repair; no water leaks		
Proper backflow prevention (fill line, backwash drain pipe)		
STRUCTURE	IN	OUT
No suction hazards		
No drain covers expired		
Pool shell is maintained in good repair and free from chips and cracks		
Pool shell maintained clean and free of algae		
Required depth and safety making are installed; marking are not faded		
Decks are maintained in good repair		
Steps, hand rails, ladders, and access devices are maintained in good repair		
All lights are functional and provide adequate illumination		
MAINTENANCE	IN	OUT
Adequate flow rate through pump to meet minimum turnover rate		
DPD Test kit available		
Daily records current/available		
Pool and related areas maintained clean		
No animals in pool area		
ANCILLARY FACILITIES	IN	OUT
Restrooms are clean, stocked with supplies, and in good repair		
Drinking fountain provided and functional		
Bathing suits/Towels cleaned and sanitized; clean storage (if applicable)		
HEALTH/SUPERVISION	IN	OUT
Sick employees excluded from pool area	<u> </u>	_ <u> </u>
Sick patrons excluded from using pool/spa	<u> </u>	
Certified life guards on duty (pools with direct fee for access)		
Designate pool operator		
UEALTU DEDAUT		0115
HEALTH PERMIT Health permit is valid	IN	OUT
	<u> </u>	
No construction or alterations without DEHS approval		

DIVISION OF ENVIRONMENTAL HEALTH SERVICES CONTACT INFORMATION



Phone: (800) 442-2283 ehs.sbcounty.gov

After Hours Communication Center: (800) 472-2376

County Government Center

385 N. Arrowhead Avenue San Bernardino, CA 92415 Fax: (909) 387-4323

Jerry Lewis High Desert Gov't Center

15900 Smoke Tree Street, Suite 131 Hesperia, CA 92345

Fax: (760) 995-8170

Rancho Cucamonga Office

8575 Haven Avenue, Suite 130 Rancho Cucamonga, CA 91730

Fax: (909) 948-5069