Swimming Pool Water Quality Program

Responsible Administrator: Environmental Health Specialist
Revised: October 2022

Summary: This section outlines the policy and procedures related to the Swimming Pool Water Quality Program that is administered through the Environmental Health & Safety (EH&S) Department.

1. Program Description

The goal of this program is two-fold:

- The campus Registered Environmental Health Specialist (REHS) serves as a resource person for the campus community for current information on Public Swimming Pool Safety.
- To provide reasonable and adequate guidance in reporting alleged outbreaks of illness due to swimming at one of the swimming facilities on campus property and to focus on the inspection of the campus swimming facilities on campus property.

2. Scope

This program applies to pools and spas located on campus property, including University Hills. The Public Pool Safety Program will protect public health and comfort by monitoring the campus swimming facilities for compliance with the California Health and Safety Code, thereby, providing a safe environment to enjoy recreational swimming on campus property.

3. Definitions

Waterborne Illness: A disease that is carried or has been transmitted through water.

REHS: Registered Environmental Health Specialist (i.e. Health Inspector)

4. Responsibilities

The campus REHS enforces the requirements contained in the California Health and Safety Code. These requirements include:

- Plan review to determine whether a new or remodeled pool complies with California Health and Safety Code requirements AND on-site construction inspections.
- Unannounced inspections of pools throughout the year to check that the fencing and gates are in good working order, to monitor the pool water for clarity and sanitizer level and to check for required safety equipment, warning signs and other safety issues.
- Investigations of complaints from the public regarding unsafe or unsanitary public pools.
5. Program Components

5.1. Pool Operational Requirements

The following is a summary of some of the important health and safety issues that are enforced by EH&S.

5.1.1 Maintain free chlorine residual without cyanuric acid between 1.0 and 10 parts per million and with cyanuric acid between 2 and 10 parts per million. For spa/wading/spray ground maintain free chlorine between 3 and 10 parts per million. Cyanuric acid readings should not exceed 100 ppm and shall be tested for by the operator at least once per month.

5.1.2 An approved working disinfectant device (automatic chlorinator) is required. Continuous feeding of disinfectant and pool filtration is required during the hours the pool is available for use.

5.1.3 The pH is to be maintained between 7.2 and 8.0.

5.1.4 Pool cannot be used if water is not clean and clear.

5.2 Safety Equipment:

5.2.1 Safety and rescue equipment should be readily accessible at every swimming pool. These include:
- Body hook attached to a light, strong pole at least 12 feet in length.
- Life ring attached to a 3/16-inch line long enough to span the maximum width of the pool (Minimum exterior diameter of ring should be 17 inches).

5.2.1 Safety signs (posted in plain view from the nearby deck). These signs include:

- Artificial Respiration and CPR: Diagrammed illustrations of artificial respiration procedures.
- Keep Gate Closed: All pools must post a “Keep Gate Closed” or “Keep Closed” sign on the exterior side of each entrance gate.
- Diarrhea: All pools must have a sign at each entrance in letter at least 1 inch high that states persons currently having active diarrhea or who have had active diarrhea within the previous 14 days shall not be allowed to enter the pool water.
- Maximum Occupant Capacity: This sign indicates the maximum number of pool users allowed in the pool at one time.
  - Spa: Pool maximum capacity = surface area (in square feet)/10
  - All other pools: Maximum capacity = surface area (in square feet)/20
- Emergency (911): The emergency telephone number 911 must be at least 4 inches. A number of the nearest emergency rescue services along with the name and street address of the pool facility shall also be posted (at least 1 inch numbers and text).
- No Diving: All pools with a maximum water depth of 6 feet or less shall have a “No Diving” sign posted in a conspicuous place.
- Emergency Exit: Unless all gates/doors allow keyless egress, all pool enclosures constructed after July 1, 1994 must post “Emergency Exit” signs on all gates/doors that have keyless egress.
• Spa Emergency Shut Off Switch: All spa emergency shut-off switches shall be labeled in at least 1 inch lettering.
• Spa Warning: The following warning sign must be posted adjacent to all spa pools

<table>
<thead>
<tr>
<th>CAUTION</th>
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<tbody>
<tr>
<td>Elderly persons, pregnant women, infants and those with health conditions requiring medical care should consult a physician before entering a spa.</td>
</tr>
<tr>
<td>Unsupervised use by children under the age of 14 is prohibited.</td>
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<tr>
<td>Hot water immersion while under the influence of alcohol, narcotics, drugs or medicines may lead to serious consequences and is not recommended.</td>
</tr>
<tr>
<td>Do not use alone.</td>
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<tr>
<td>Long exposure may result in nausea, dizziness or fainting.</td>
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• The spa pool maximum water temperature is 104°F Fahrenheit (40°C Celsius).
• California regulations require pool operator test disinfectant residual and pH a minimum once per day. Records shall be maintained for at least two years.
• Drain covers need to be secured and removable only with tools and must be designed to prevent physical entrapment or a suction hazard.
• Safety rope and buoys need to be maintained in the pool area if the pool is equipped for fastening such equipment.

Should you have any questions or require further information about these requirements, please call Environmental Health and Safety at (949) 824-6200.

5.3 Imminent Health Hazards:

This program focuses on the inspection of swimming, wading and spa pools used by the public. The campus REHS will conduct unannounced routine inspections of pools throughout the year. Some potentially hazardous conditions could lead EH&S to order a public swimming, spa or wade pool closed. Immediate corrective action is needed for the following conditions:

• **Loose, damaged, or missing main drain covers.** Drowning and injuries have occurred when users became entrapped by the suction produced from the drain in the bottom of spas, wading pools, and swimming pools.

• **Pool water that is so cloudy that the main drain at the bottom of the pool is not visible.** Drownings and near drownings have occurred when children have fallen into a dirty, cloudy pool and could not be located in time to effect a rescue.

• **Nonfunctional recirculation system.** The recirculation system is designed to maintain the pool water in a clear, disinfected and bacteriologically safe condition. If this system is malfunctioning or has been placed out of service for any length of time, it is impossible to maintain good water quality in the pool, spa or wading pool. It is vital that pool water be maintained clear and disinfected.

• **The pool fencing/enclosure is in disrepair.** A pool that is not adequately fenced may be easily accessible to small children. Proper fencing is the primary means to prevent drowning by hindering access to the pool by small children. Changes to existing fencing or the installation of a new enclosure must receive approval from EH&S prior to the start of construction.

• **Human fecal contamination in the pool.** Outbreaks of disease have been associated with pool water contaminated with feces. When fecal matter is observed, the pool shall be immediately closed and the fecal matter removed. The pool shall be super- chlorinated, the water filtered for at least 24 hours and the filters backwashed prior to reopening the pool. This same procedure should be employed if a dead animal is found in the pool.

• **Chlorine Residual is below the minimum requirement.**
6. Reporting Requirements

If you have a complaint about a swimming facility or the locker rooms on campus, please contact the Environmental Health & Safety (EH&S) at the following telephone number: (949) 824-6200. The campus Registered Environmental Health Specialist will contact you the next workday.

7. References

Links for Additional Information:

California Department of Public Health
California Health and Safety Code
Centers for Disease Control
The Association of Pool and Spa Professionals

Other Jurisdictions: Here is a comprehensive list of the other Health Departments in the Los Angeles, Orange and San Diego Counties.

Orange County Health Care Agency
Los Angeles County Environmental Health
San Bernardino County Division of Environmental Health
Riverside County Environmental Health
San Diego County Environmental Health