

FINAL STATEMENT OF REASONS

The information contained in the Initial Statement of Reasons (ISOR) remains unchanged except for the following, and the ISOR is incorporated by reference in the Final Statement of Reasons.

ADDENDUM I

45-Day Notice of Public Availability

Summary of Comments and Responses to Comments

The Department received comments from 20 commenters during the 45-day public notice period beginning September 6, 2013, and ending October 28, 2013. The comments below are aggregated and summarized or are responded to individually.

CYANURIC ACID CONCENTRATION

The Department received several comments regarding the proposal to decrease the allowable maximum cyanuric acid (CYA) concentration in a public swimming pool to 50.0 parts per million (ppm) in section 65530. Commenters expressed concern that limiting the CYA concentration in public swimming pools to 50.0 ppm would have consequences, such as the waste of water, and would compel pool operators to use alternative means of disinfection, thereby increasing costs and the likelihood of chemical incidents. Several chemical incidents were referenced by one commenter involving products containing alternative chemicals to CYA. Commenters also stated that this proposal is of little to no benefit, is unwarranted and arbitrary, would essentially ban the use of chlorinated isocyanurates, and would have counterproductive impacts at the point of application. One commenter stated that caution should be used against using specific studies as the basis for lowering the CYA maximum to 50 ppm.

The commenters made the following comments:

- Lowering the maximum CYA level to 50 ppm will result in having to drain the pool more often, leading to a waste of water. Commenter: 8
- Water restriction and the need to keep pools open will not allow operators to routinely replace pool water to keep pools using trichlor tablets under the 50 ppm limit. Commenter: 14
- If trichlor is taken away, those not comfortable with the alternative disinfection chemicals will choose a continuous-drip system to constantly replace the pool water with fresh water. Commenter: 18

- The commenter's commercial clients are opposed to the proposed 50 ppm maximum allowable CYA concentration in outdoor aquatic venues. Commenter: 18
- Lowering the maximum allowable CYA concentration will have negative and counterproductive impacts at the point of application, by the applicator and in the transportation of products necessary to effectively treat small-volume commercial outdoor aquatic venues. Commenter: 18
- Lowering the max level of CYA to 50 ppm will compel aquatic venues using trichlor sticks, tablets, or pucks to consider other means of disinfection, including chlorine bleach. Alternative chemicals used to disinfect public swimming pool water are more dangerous, can increase the risk of serious chemical incidents, and it will cost significantly more to switch to a different feed system and to provide additional safe chemical storage space. Commenters: 8, 14, 15, 17, 18
- Switching from CYA to bleach or calcium hypochlorite could pose confined-space concerns, increasing the propensity of injuries and broader safety issues. Commenter: 18
- The shift of disinfection products will add many burdensome responsibilities and increased costs to the general maintenance staff in the hotel, motel, and condominium sector beyond what is currently required for stabilized chlorine (trichlor) tablets, sticks, or pucks. This is simply an impractical solution. Commenter: 18
- Using a different sanitizer will require a learning behavior change for the customers using it. This could present other health and safety issues with handling, storage, and customers not paying attention to their pH level, causing the disinfectant to be lower. Commenter: 18
- Governmental costs to police the storage limits of alternative disinfectants that replace trichlor will increase. Commenter: 18
- The use of bleach requires the steady delivery of muriatic acid to offset sodium hypochlorite's high pH, thereby necessitating additional feed equipment and additional costs and expenses. Commenter: 18
- Limiting the maximum CYA level to 50 ppm will impose an untenable restriction on the use of chlorinated isocyanurates and impose a hardship to the hotel, motel, apartment, and condominium sector and to consumers of stabilized chlorine. Commenter: 18
- The reduction of maximum allowable cyanuric acid in outdoor aquatic venues of 50 ppm is needless and without foundation even in the presence of the technical citation in this proposed regulation. Commenter: 17

- 50 ppm CYA is a departure from the Centers for Disease Control and Prevention (CDC), ANSI-APSP-11, and World Health Organization recommendations. Commenter: 12
- There does not appear to be any hard evidence provided that CYA concentrations between 50 and 100 ppm in swimming pools have given rise to any serious problems or health issues. It appears that the CDC itself accepted that there is currently not sufficient research to support the conclusion that a CYA concentration of more than 50 ppm is problematic. Moving now to place a limit of 50 ppm is extremely premature. Commenter: 17
- 50 ppm makes it difficult to use EPA-registered chlorinated isocyanurates, which are important for protecting public health because of their chlorine-stabilization effects. Commenters: 12, 17
- 50 ppm is arbitrary, with no improved benefit to public health, compared with 100 ppm. There is little benefit in limiting the CYA level to 50 ppm versus limiting the CYA level to 100 ppm. Commenters: 12, 15
- The risk of managing swimming pool chlorination without CYA products may outweigh the benefits of reducing CYA to 50 ppm, because if the task becomes too difficult operators will stay away from the use of isocyanurates, potentially leading to rapid loss of chlorination, leading to unsafe water for the public. Commenter: 17
- The proposal to limit CYA to 50 ppm in public pools is unwarranted. Commenter: 14
- Limiting the CYA level to 50 ppm effectively bans the use of chlorinated isocyanurates from these swimming pools. Commenters: 14, 15
- The cost from a CYA limit of 50 ppm could be considerably higher than estimated in the initial statement of reasons. Commenter: 14
- The reduction of CYA to 50 ppm is overreaching, and the commenter is gravely concerned that the alternatives may present a bigger threat to public health than does the current solution. Commenter: 18
- Switching to an alternative disinfection delivery system requires the purchase and installation of different feed systems at existing aquatic venues. Commenter: 14
- Proposed CYA limitations will lead to permanent loss of sales, leading to lower production and resulting in permanent loss of jobs. Commenter: 17

- The Department needs to be certain the data support the conclusion mandating the reduction of CYA concentrations to 50 ppm to save lives or reduce a known number of health issues. Commenter: 17
- Our firm belief is that there is not sufficient evidence to lead the CDC to reduce CYA to 50 ppm. Commenter: 17
- A reduction of the maximum allowable CYA concentration to 50 ppm would make the proper use of stabilized chlorine against the law and establish minimum concentrations that could not be achieved through normal pool operation and maintenance practices. Commenter: 18
- Increase the max level of CYA to 100 ppm. Commenters: 8, 12, 14, 18, 20
- 100 ppm cyanuric acid has been the standard for many years. Commenter: 17
- 100 ppm is easy to maintain. Commenter: 12
- The Model Aquatic Health Code has raised the CYA limit to 100 ppm in outdoor pools. Commenter: 14
- In light of the CDC's position on CYA, why was it decided at this juncture to propose a limitation of 50 ppm on CYA? Commenter: 17
- Raising the CYA limit to 100 ppm would allow the continued use of the chlorinated isocyanurate products, trichlor, and dichlor in smaller commercial pools where these products are now used. Commenter: 15
- Extensive field data demonstrate that pools can be maintained in bacteriologically satisfactory condition, even when the CYA concentration is 100 ppm, or even higher. Commenter: 15
- The CYA level should not be restricted without a careful consideration of how fast the rate at which bacteria are killed is fast enough. Commenter: 15
- The increase in killing time due to the presence of up to 100 ppm of cyanuric acid does not imply that the bacteria populations in the pool water will be out of control for bacteria and viruses that are readily controlled by available chlorine. Commenter: 15
- These regulations need to be based on concrete evidence and not speculation. Based on the proposal's statements and references, it does not appear to us that there is currently sufficient concrete evidence on which to base this proposal. Science for the reduction of CYA is not conclusive. Commenter: 17
- Referring to the "etching of pool plaster" in absence of any peer-reviewed scientific references: there are counter-prevailing arguments as to the real cause of premature pool plaster deterioration and damage with plaster coupons made with commonly seen mistakes, including high water-to-cement ratios, excessive

calcium-chloride-curing accelerate, and aqueous submersion of plaster coupons soon after troweling. Commenter: 20

- The National Plasters Council, in its technical manual, sixth edition, speaks to long-term deterioration, specifically citing aggressive chemical attack and cites the need for swimming pool water to be within the acceptable water-balance condition in accordance with ANSI/APSP Standards. The CYA-specific minimum (20 ppm), ideal (30-50 ppm), and maximum (100 ppm) is referenced. Commenter: 20
- The statement with respect to the effect of cyanuric acid on pool plaster is not substantiated in the absence of laboratory and/or field testing or fully vetted peer-reviewed scientific studies and accompanying publications. Commenter: 20

Response: The Department repealed the proposed provision requiring a cyanuric acid (CYA) maximum level of 50 ppm before the additional 15-day notice-and-comment period, as explained in the Supplemental Statement of Reasons (SSOR). At the time the 45-day proposed regulations and Initial Statement of Reasons were drafted for section 65530, the Centers for Disease Control and Prevention's (CDC's) Model Aquatic Health Code (MAHC) proposed a maximum CYA concentration of 50 ppm. However, CDC personnel informed the Department after the 45-day comment period began that the MAHC recommendation for a maximum CYA concentration was revised from 50 ppm to 100 ppm in the draft Disinfection and Water Quality Module of the MAHC. This change from 50 ppm to 100 ppm by the CDC was based on public comments received during the public-comment period for the Disinfection and Water Quality Module. The Department agrees with the commenters who requested a raise in the CYA concentration back to the existing standard of 100 ppm, at least until CDC and public research brings more clarity to the appropriate concentration of CYA in a public pool. The CYA maximum has been raised back to 100.0 ppm.

DIARRHEA SIGN

Comment: The Department received many comments expressing concern over the belief that section 65541(d) required pool operators to monitor whether pool employees and pool users currently have or have had diarrhea in the prior 14 days. There was concern that the diarrhea-sign requirement meant pool operators would have to identify those who were ill and prevent them from entering the pool, an act that could amount to harassment. One commenter stated that the signs may be stolen because of their salacious content, another commenter pointed out that people eating poolside at hotels

would find the sign unappetizing, and another commented that people are offended by the signs. One commenter noted that the subsection's requirement appeared to create a new standard of care for the pool owner, and another person was concerned people would not remember whether they had had diarrhea in the previous two weeks. There were also many comments pointing out that Title 24, the California Building Standards Code, already requires the sign, so that it being in Title 22 was unnecessary.

Commenters: 2, 5, 6, 9, 10, 16, 17

Response: The Department acknowledges the concerns of pool owners regarding the signage requirement and has repealed the subsection requiring the sign's posting. The provision was never meant to require pool operators or owners to monitor people for having diarrhea; it was up to each individual whether he or she entered the pool. However, the Department realizes that the regulation caused confusion and concern and so has repealed it.

Title 24 of the California Code of Regulations, the California Building Standards Code, however, still requires the sign in certain circumstances. The now-repealed requirement of posting the sign would not have been duplicative because the new requirement would have applied to all pools at all times, which is not the case in Title 24.

SCOPE OF WHAT IS A "PUBLIC POOL"

The Department received numerous public comments about the scope of what constitutes a "public pool" for the purposes of these regulations. Many were concerned about the fact that pools in which the public is not invited are considered "public pools." Some were concerned because the regulation does not cover pools that are part of housing arrangements with three or fewer residential units. Below are the comments and responses to these and other concerns regarding the scope of what is a public pool for the purposes of this chapter.

Comment: The definition in section 65503(d) of "private pools" includes a pool "intended for use by occupants of not more than three residential units." A commenter stated that the definition "will create considerable confusing and competitive inequity regarding the types of Hotels to which the proposed regulations will apply."

Commenter: 9

Response: The Department appreciates the comment but does not believe this provision is confusing. If an apartment, condominium, or housing association has three or fewer residential units, its pool would be considered, for the purposes of this chapter, a private pool. "Residential units" does not include hotel rooms. Therefore, all transient

lodging facilities—which are not zoned as residential, no matter how few rooms they have—with a pool have a *public* pool, not a private pool.

Comment: Commenter 9 pointed out that section 116049.1 of the Health and Safety Code has a different definition of a public pool than the newly amended section 65501(h). The commenter also cited the Swimming Pool Safety Act, which begins in the Health and Safety Code at section 115920. This Act also defines a “public pool” differently than does section 65501(h).

Commenter: 9

Response: The first statute cited by the commenter (Health and Safety Code section 116049.1) explicitly states that the definition applies to that section of the Health and Safety Code only. That section addresses swimming pool underwater-lighting requirements and ground-fault circuit interrupters. Not only does that statute have no bearing on the regulations amended and promulgated here, but its definition of a “public pool” is explicitly meant to be used in that section only.

Next cited was Health and Safety Code section 115921(b) of the Swimming Pool Safety Act. The Swimming Pool Safety Act is meant to only apply to the pools of single-family homes. It has a completely different purpose than what the Department is authorized and seeking to do with these regulations.

No changes have been made in response to this comment.

Comment: One commenter believed that pools at member-owned pools should not be considered “public” when the public is not invited in. In addition, this commenter said that homeowners associations’ member–owners already have an interest in keeping their pools safe, so the regulations governing those pools are unnecessary.

Commenter: 7

Response: The Department disagrees that, because not all of the public is allowed into a pool, it should not be considered a public pool. These regulations are meant to protect the health and safety of every member of the public despite their membership status in a homeowners association, a country club, or a certain community.

Additionally, there is case law specifically holding that private-club pools are “public” for purposes of the article that grants the Department’s authority to regulate public pools (Division 104, Part 10, Chapter 5, Article 5 of the Health and Safety Code). With regard to section 116025 of that article, which defines “public swimming pool,” a California Court of Appeal found that a country club swimming pool was public within the relevant statutes and regulations of the State Department of Health promulgated thereunder. *Lucas v. Hesperia Gold and Country Club*, 255 Cal. App.2d 241 (1967).

In addition, the public at large has an interest in keeping pools healthful and safe. However, not everyone knows how to do this, and some pool operators will not do this without regulation. Regulations such as these exist to guide and regulate behavior where failure to comply could create a health hazard. The Department believes that homeowners-association members and their guests should not be excluded from the protection of regulations governing public pools.

Comment: A commenter believed that apartments and condominiums should be excluded from the scope of what defines a public pool. This commenter also wanted the Department to provide evidence that justifies the application of these regulations to “low-traffic” apartment and condominium pools.

Commenter: 6

Response: The health and safety risk at a small apartment or condominium pool may be less than the risk at a large water venue, but the public health and safety hazards are the same. For instance, the CDC recommendations do not differentiate between small and large pools or between high-traffic and low-traffic pools because it takes only one pool user with diarrhea to put the health of other pool users at risk. Safety equipment such as the rescue pole and life ring is needed in small pools and large pools alike. Similarly, exposure to vomit, blood, and feces excreted during a near drowning or drowning can put the health of other pool users at risk regardless of how high the typical volume of the pool is. Therefore, the Department made no changes to the regulations in response to this comment.

Comment: One commenter did not want section 65541(c) to apply to apartment and condominium owners. This section requires the pool operator to inform the enforcing agent when two or more lifeguards or pool users at the public pool report to the pool operator that they have had diarrhea, when such reports to the pool operator happen within five days of each other.

Commenter: 6

Response: This regulation applies to all public pools as defined in this chapter, and the Department believes this is a necessary revision to the regulation to protect the health and safety of public pool users and the employees who work at public pools. Waterborne-disease outbreaks associated with pools are often caused by people with diarrhea or by people with recently resolved diarrhea who are still shedding pathogenic viruses or parasites, using a pool, and contaminating it. Chlorine residual in pool water cannot be relied upon to decrease the infection risk in the presence of chlorine-resistant pathogens. To prevent pool water from becoming contaminated and thereby causing

outbreaks, it is necessary for pool users with active diarrhea or who have had active diarrhea within the previous 14 days to not enter the pool. Once an outbreak caused by contaminated pool water occurs, it is important to recognize the outbreak as soon as possible and to intervene so that fewer people are at risk of infection. Notification to the local enforcing agent is necessary to allow local health officials to conduct appropriate communicable-disease investigations and to take necessary actions to stop an outbreak from spreading. No changes to the regulation were made in response to this comment.

Comment: Commenters suggested adding types of public pools such as “spray grounds,” “special purpose pool,” and “wave pool” to the list of examples of public pools in section 65503.

Commenters: 2, 5

Response: The Department agreed that adding these types of public pools to the section was a reasonable idea and made the amendments to the section prior to the additional 15-day notice-and-comment period.

Comment: Two commenters remarked that the phrase “building or area pool” is vague.

Commenters: 4, 5

Response: The Department agreed that this was a vague phrase and struck it prior to the additional 15-day notice-and-comment period.

Comment: One commenter asked whether there was a difference between a “health and fitness pool” and a “health establishment pool” in section 65503.

Commenter: 4

Response: The Department understood the confusion that could lie in having both terms in the list of examples of public pools, so “health establishment pool” was struck prior to the additional 15-day notice-and-comment period.

Comment: A commenter asked whether “therapeutic tubs or baths” included floatation tanks.

Commenter: 5

Response: Floatation tanks may or may not be considered therapeutic tubs or baths depending on the purpose for which they are used.

Comment: A commenter believed that the Department should place geothermal mineral water pools made for therapeutic soaking and bathing within the definition of “special purpose pools” and therefore make them exempt from these regulations.

Commenter: 11

Response: The Department does not consider geothermal mineral water pools to be “special purpose pools.” They are public pools and therefore are regulated under this chapter of Title 22. However, even were the Department to add the language suggested by the commenter and place geothermal mineral pools made for therapeutic soaking and bathing within the definition of “special purpose pool,” it would not make them exempt from these regulations, because special purpose pools are not exempt. As stated in section 65501(h), only individual therapeutic tubs or baths where the main purpose is cleaning of the body and private pools as defined in section 65503(d) are not considered public pools for the provisions of this chapter. The Department made no revisions in response to this comment.

Comment: A commenter thought that section 65503(b) should include a reference to the California Building Standards Code to clarify that “a pool supplied with water from a source approved by the enforcing agency need not necessarily meet all the quality standards of potable water so as to allow the continued use of geothermal mineral water as a source for supplying a public pool.” This commenter proposed the Department amend the section to say that geothermal mineral water sources are exempt from the public pool standards of this chapter.

Commenter: 11

Response: The commenter is correct in that the water supplied to a public pool can be non-potable if approved by the enforcing agent as allowed for under the provisions of the California Building Standards Code in Title 24, section 3127B. However, the water supplied to a public pool must meet the public pool water-quality standards specified in section 65531 regardless of whether the source is potable or not. Mineral spring pools are public pools and are subject to the provisions of this chapter. Mineral spring pools are only exempt from the disinfection requirements specified in section 65529 if monthly bacteriological water-quality standards are met according to the provision specified in section 65529. Only pools that are not public pools are exempt from the standards of this chapter. No changes have been made in response to this comment.

Comment: One commenter wanted a revision to section 65503 that would add “recreational vehicle park pools,” “manufactured housing community pools,” and “mobilehome park pools” to the list of examples of public pools.

Commenter: 16

Response: The Department does not believe that examples of every possible type of public pool are necessary. “Public pool” is well defined, and the list in section 65503 is

just a sample of different types of public pools; it is not exhaustive. The Department made no revisions in response to this comment.

FINANCIAL IMPACT OF THE DAILY-TESTING REQUIREMENT

Comments: We received many comments during the 45-day notice period in which commenters expressed concern that the new public pool regulations would have a negative financial impact on pool owners, particularly those at small- and medium-sized apartment or condominium buildings and complexes or small hotels. The commenters believed that following the new regulations would require employing one or more pool operators and that, generally, the regulations would result in more-expensive maintenance.

In particular, commenters said that the requirement that the pool disinfectant residual, pH, and temperature be tested daily would result in considerably more-expensive maintenance procedures. The commenters believed this would result in the need to hire someone to come to the pool every day, something that one commenter estimated would amount to \$7,300 to \$10,950 more in maintenance costs per year. This commenter stated that compliance with other regulations (such as with the American Disabilities Act) or employee salaries would have to be cut. One commenter said that it appeared the state did not take these fiscal considerations into account when promulgating these regulations.

One commenter said that the testing requirement would create a new legal liability for pool owners.

Commenters: 1, 7, 8, 9, 10, 16

Response: Section 65523 has, since 1987, required the daily testing of disinfectant residual, pH, and quantity of chemicals, as well as the daily cleaning of filters, for certain types of public pools. Those exempted from the daily testing and recording are defined in Health and Safety Code section 116048. For some pools in smaller common-interest developments, as defined in the Health and Safety Code, the requirement to test and record *daily* does not apply; these pool operators must comply with section 65523, but not at a daily rate.

For all other public pools, section 65523 as amended is not creating a new requirement. The regulation, prior to its amendment here, stated, “the operator of each pool open for use shall keep a *daily* record of information regarding operation, including readings of disinfectant residual, pH and maintenance procedures such as cleaning of filters and quantity of chemicals used” (emphasis added). Since 1987, the law has required pool operators to come to the pool daily and to test the residual and pH. If pool

owners have been complying with section 65523, there will no increase in their maintenance costs due to daily testing and recordkeeping.

Further, the only additional monitoring that amended section 65523 requires is the testing of the public pool water temperature in heated public pools. The Department believes the financial burden that imposes is minimal to nonexistent.

The Department completed an economic impact analysis and made an initial determination that the regulations would not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. The regulations are reasonable and necessary to protect public health and safety.

Last, because section 65523 daily testing is not a new requirement, there is no new legal liability for pool owners.

No changes have been made in response to this comment.

OTHER TESTING CONCERNS

Comment: One commenter thought the water-testing requirement in section 65523 should apply only where a heater is present or the pool is “naturally heated.”

Commenter: 16

Response: In response to the concern over the requirement to test the water temperature daily, the Department made this a requirement only for heated pools and for hot springs, as was stated in the Supplemental Statement of Reasons accompanying the additional 15-day proposed amendments. The word “heated” was added to the language of section 65523 so that it now reads, “The pool operator shall also test heated pools’ water temperature a minimum of once per day.”

Comment: Two commenters were concerned about the regulations allowing a pool operator to use an automatic chemical monitoring-and-control system for daily testing and recording only when the enforcing agent has approved the system and when it is properly calibrated. The commenters believed the regulation requiring written daily records would effectively nullify the use of remote monitoring systems.

Commenters: 8, 9

Response: The regulation requiring daily written records is not new. Although these regulations permit the pool operator to use automatic chemical monitoring-and-control systems to accomplish the testing duties, automatic systems are only allowed when approved by the enforcing agent and where the system is properly calibrated. The requirement for approval by the enforcing agent exists because automatic systems work only when they are properly calibrated. If the enforcing agent finds the equipment is

faulty, the enforcing agent will not approve the automatic system and the pool operator will not be allowed to use it. These restrictions are in place to ensure water-quality-standard, temperature, and other health and safety requirements are met at all public pools with automatic systems.

The Department understands the concern regarding the requirement for written daily records even when using an automatic system. However, the required written records may include a computer printout of automatic data collection, electronic data, or other written records approved by the enforcing agent. The data must be available onsite at the public pool for inspection by the enforcing agent.

Comment: There were other concerns regarding the disinfection testing requirements. One commenter noted that no sampling frequency was specified in section 65529.

Commenter: 4

Response: The language in the previous version of section 65523 already required a daily record of disinfectant residual, pH, and other measurements when the pool is in use. The newly promulgated regulations do not change the minimum testing-frequency requirement.

The amended language in section 65529 requires sampling at a frequency needed to verify there is the disinfectant concentration allowed under that section when the pool is open for use. The sampling frequency is pool specific, and how often a pool will need to be sampled will depend on the type of public pool; the number of pool users in a given time period; whether there are infants, toddlers, and special-needs pool users present; the efficacy of the pool filtration system; the size of the public pool and its water volume; and numerous other site-specific factors. Also, additional samples may need to be taken for corrective action.

Comment: Commenter 5 suggested the Department make the requirement in section 65523(c) to test combined-chlorine concentrations a weekly requirement, rather than requiring testing at a frequency to ensure the concentration is below 0.4 ppm.

Commenter: 5

Response: The Department believes that it is important to keep the combined-chlorine concentration below 0.4 ppm. The regulation requires the testing of the combined-chlorine concentration of a public pool at a frequency that results in the assurance that the pool water's combine chlorine is below 0.4 ppm, whatever that frequency may be, although the frequency will need to be more than once per week. Not defining a frequency allows pool operators the flexibility to choose the frequency of combined-chlorine testing. Specifying a frequency is not appropriate in this section because the

frequency will vary based on the concentration in the water. No changes were made in response to this comment.

Comment: One commenter said that the amended regulations fail to “account for the days when the facilities are non-operational, closed, empty, or otherwise not used.”

Commenter: 7

Response: The commenter failed to state which regulations fail to take into account times when the pool is not in use. However, the Department has taken this into consideration, for instance in section 65523, which expressly states that the daily testing and recording requirements only apply when a pool is open for use. No changes have been made in response to this comment.

Comment: Commenter 10 suggested the Department change the requirement of testing pool water daily in section 65523 to a requirement that testing only be done after a “triggering event.”

Commenter: 10

Response: The Department believes that daily testing is important to protect the health and safety of public pool users, because it provides pool operators with data to make critical operational decisions necessary to keep pool water clean and clear and allows the pool operator to implement corrective actions aimed at preventing waterborne-illness events or outbreaks. It is unclear what type of event the commenter had in mind that would trigger the testing of the pool water, but the Department wishes to *prevent* health and safety incidents, not just remedy them. Preventing incidents requires the testing of the pool water at a frequency much greater than after a health or safety incident has occurred. No changes have been made in response to this comment.

Comment: A commenter suggested making the requirement to test public pool water temperature only apply to heated pools.

Commenter: 5

Response: The Department agrees and amended the text to reflect this by adding “heated” to the regulation. This was done prior to the additional 15-day notice-and-comment period.

INCIDENT REPORTING (SECTION 65546)

Comment: One commenter believed that a near-drowning or drowning incident is not related to a contamination incident and that perhaps some other procedure should be followed after a near-drowning or drowning incident. This commenter suggested: “No

one shall be allowed to enter the public pool(s) until an investigation is conducted and it is determined that it is safe to enter the pool.”

Commenter: 4

Response: To protect public health and safety, the language of section 65546(a)(1) requires pool operators to assume that a near drowning or drowning results in fecal and vomit contamination of public pool water. People often urinate, defecate, and vomit during a near drowning or drowning. Therefore, section 65546 procedures must be followed after such incidents occur. The language of the regulation is more clear, more objective, and more specific than the language proposed by the commenter. Given the public health risks from fecal and vomit contamination to other pool users following near-drowning and drowning incidents, no changes to the regulatory text were made in response to this comment.

Comment: Commenter 4 suggested that, as part of the reporting procedure required in section 65546 after a contamination incident, the day and time of the incident, the cause, and the corrective action taken be recorded.

Commenter: 4

Response: Prior to the additional 15-day notice-and-comment period, the Department amended section 65546(b)(1) to include, “the facts known about the circumstances and cause of the incident,” because the Department agrees this would be useful information. The date and time of the incident, as well as the corrective action taken, were already part of the requirements of that subsection.

Comment: One commenter believed it was unreasonable to expect a written account of all fecal, vomit, and blood incidents at an apartment or condominium pool because most apartment and condominium pools do not have a full-time staff person on duty when the pool is in use.

Commenter: 6

Response: The Department believes a written record is reasonable and, in fact, imperative in ensuring the safety and health of public pool users. These incidents present high health and safety risks to other pool users. The Department is not mandating the notification protocol for each public pool; however, we are implementing the CDC’s recommendation to have full documentation of these life-threatening incidents. If an apartment or condominium pool is open for use, it will have to establish a protocol for responding to these incidents. For instance, there must be a way for the public pool users to report such incidents to the pool operator or owner. One way would be the posting of a sign with a telephone number at which someone could be reached

who could record the incident and take the required corrective measures. No changes have been made in response to this comment.

Comment: One commenter wrote that it is unclear what a vomit or blood contamination incident is.

Commenter: 6

Response: Although vomit or blood contamination is not defined in section 65501, the Department believes it is clear what is meant in section 65546. When vomit is in the public pool, there is a vomit incident. Likewise, when blood is in the public pool, there is a blood contamination incident. The Department does not believe these terms need to be added to the definitions in section 65501, and therefore no changes were made to the regulations in response to this comment.

CLEANLINESS OF POOL

Comment: One commenter questioned what the standard in section 65533 is for the cleanliness of public pools. The commenter noted that, as written, this section requires the pool to be cleaned of any debris that has accumulated but that “accumulate” is not defined, making it seem that a pool operator must be on the premises at all times to ensure nothing accumulates, which may be hard, particularly on a windy day. The commenter wanted a definition of “accumulate” and suggested that the definition of “clean pool water” in section 65501(b) say, “public pool water free from *significant levels of dirt, oils,*” etc. This commenter also believed that section 65533 would require a full-time pool operator.

Commenter: 16

Response: No changes were made in response to this comment. The Department believes that section 65533 is clearly written and that people understand what an accumulation of debris, such as leaves and trash, looks like and when it is time to skim the pool. Further definition of “accumulate” would require precision where precision is not possible. For instance, an accumulation of scum and an accumulation of leaves and trash will look different. The point of the section is to ensure pool operators keep the pool clear of visible organic and inorganic material that does not belong in a public pool and that may gather over time, whether over a few hours, such as on a windy day, or over a day or two.

The term “accumulation” implies the passage of time and includes a reasonableness factor. When debris such as clothing, leaves, scum, or algae accumulates in a public pool, these things, whether organic or inorganic, are not safe for pool users and must be removed. Floating debris also clogs filters. These maintenance

requirements are not more burdensome than before; they are more specific to provide clarity in order to ensure public pools are maintained in a manner that protects public health and safety.

The definition of “clean pool water” in section 65501(b) has been changed, and “visible” was added along with the qualification that the organic and inorganic materials must be such that they “would pollute the water.” The Department believes this is clear and that no further changes are necessary. “Significant levels” is itself unclear, and its addition to the regulation would not add any clarity.

Section 65533 does not require a full-time pool operator. It requires a pool operator be present enough of the time to ensure that the provisions specified in this chapter are complied with, including but not limited to, testing the pool water, keeping the pool water clean and clear, and ensuring the pool’s recirculation and water-treatment systems remain operational.

Comment: One commenter thought that “dirt” and “scum” in section 65501(b) are vague terms that need to be defined.

Commenter: 10

Response: The Department believes that everyone knows what dirt is. “Scum” is a term of art in the pool-operation industry, and no further definition is necessary. Scum is essentially any mixture of contaminants that accumulates on the sides of pools and other surfaces. Dirt and scum are both pollutants. No changes have been made in response to this comment.

Comment: Regarding the definition of “clean pool water” in section 65501(b), two commenters noted that oils are regularly found in pools and that it would be impossible to keep a pool from having any oil in it. One commenter stated that there is no way to know what level of suntan oil in the water would cause pool water not to be clean.

Commenters: 10, 16

Response: Although the Department realizes that it is impossible to keep public pools clear of naturally occurring (from human skin) or artificial oils (such as suntan oils) at all times, we believe that the definition is clear and that the understanding of it requires only common sense. Where pools have visible oils present, pollution has occurred and should be remedied immediately. No changes have been made in response to this comment.

Comment: With regard to the definition of “clean pool water” in section 65501(b), one commenter pointed out that “organic and inorganic materials” include human bodies and

swimsuits, respectively. Another commenter pointed out that volleyball-game equipment and lane lines are visible and inorganic. This commenter speculated that an overzealous enforcing agent could find that these things are prohibited.

Commenters: 10, 16

Response: The Department agrees with the commenters and therefore added “visible” before “organic and inorganic materials” and added “that would pollute the water” after. The Department believes the definition as promulgated is clear and easy to understand. A pool with any visible matter that pollutes it is not clean. Swimmers, swimsuits, lane lines, and the like are not pollutants.

COMMUNICABLE DISEASES

Comment: One commenter thought that under section 65541(b) pool operators would be responsible for monitoring whether pool users and pool employees had coughs, cold sores, or nasal or ear discharges and for preventing them from entering the public pool.

Commenter: 10

Response: The Department realizes that pool operators cannot monitor all public pool users and pool employees for contagious illnesses. Section 65541(b) does not require pool operators to monitor for illnesses. Each pool user and pool employee must determine whether he or she is in an infectious state and whether to enter the public pool. The requirement for a note from a physician is an added safeguard, and it is incumbent upon the pool user or employee to determine whether one is necessary.

Comment: Some commenters expressed an interest in having “communicable disease” as used in section 65541 defined and having examples given.

Commenters: 2, 5

Response: The Department agreed with these commenters and amended the text to include a definition of “communicable disease” in section 65501 and added some examples in section 65541(b) of communicable diseases of special concern with regard to public pools. These amendments were made prior to the additional 15-day notice-and-comment period.

Comment: A couple of commenters did not think that it was necessary to bar public pool users from the public pool for having a cough. This seemed “severe” to commenter 2, and commenter 5 thought that all of the signs of having a communicable disease (cough, cold sores, and nasal or ear discharge) as well as the wearing of bandages should be stricken from section 65541(b).

Commenters: 2, 5

Response: The Department disagrees with both commenters, and no changes to the subsection were made in response to these comments. Coughs, cold sores, and nasal and ear discharge are often signs of a person being in an infectious state, and therefore it is unhealthful to have such persons in a public pool. Coughing is a mode by which a communicable disease is spread. Coughing is a symptom common to some communicable diseases, like tuberculosis, whooping cough, and influenza. Likewise, the wearing of bandages is unhealthful to other public pool users because bandages can carry pathogens. When a person must wear a bandage, that person should not enter a public pool.

“POOL OPERATOR” AND LIABILITY

Comment: Some commenters said that proposed section 65501(f), which defines “Pool Operator” and sets out who is responsible for following the public pool health and safety regulations was confusing and that it was not clear who was ultimately responsible for a failure to satisfy the regulations’ requirements. The commenters also wanted the Department to make clear that the delegation of pool-operator duties may be given to more than one person. In addition, commenter 9 was concerned that persons delegated with the task required by the regulations may not be aware of all that is required, creating a liability for the pool owner.

Commenters: 8, 9

Response: The Department agrees with the commenters that the definition was not clear and amended the regulation prior to the additional 15-day notice-and-comment period. The definition of “pool operator” now makes clear that, although the duties required in the regulations may be delegated to another person or persons, including pool-maintenance companies, the ultimate responsibility for following the regulations exclusively lies with the pool owner. It is the pool owner who will be held accountable should any of the duties imposed by the regulations not be undertaken.

In addition, the Department believes it is implicit in the regulation that more than one person may be given the task of carrying out the regulations, and therefore we have not amended “person” to “persons.” For the same reason we have not added “entity” to the list of who a “pool operator” may be. We believe this is implicit in the language and an unnecessary change.

Regarding the liability for the pool owner and the possibility that the pool operators the pool owner chooses will not be well informed of the regulations’ requirements, the Department believes that it is the pool owner’s responsibility to ensure he or she hires and educates the pool operators in what is required and reviews the pool operator’s work to ensure the regulations are being followed.

CREATION OF NEW LEGAL LIABILITIES

Comment: Commenter 10 wrote that the section requiring recordkeeping when a fecal, vomit, or blood contamination occurs or when there is a near drowning or drowning (section 65523(e)) creates a new legal liability. Presumably, the commenter means that a pool owner could be sued by a pool user if such a record were not kept. The commenter also thought that section 65527, which requires the pool water be kept clean and clear as defined in this chapter, created a new legal liability under which a pool owner could potentially be sued. The commenter thought that these new liabilities would negatively affect small-apartment managers and owners and thought that the Department failed to analyze or discuss the legal ramifications of the amended regulations on small businesses in the Initial Statement of Reasons. The commenter wrote, “What is discussed erroneously minimizes the impact on small businesses like apartment owners.”

Commenter: 10

Response: The Department appreciates the comments and understands the fear many businesses have of litigation. However, the Department believes that these regulations are necessary to protect the health and well-being of public pool users. Failure to follow them may be evidence of a breach of the standard of care. However, this does not justify inaction by the Department.

BROMINE RESIDUAL

Comment: One commenter suggested the Department change the minimum bromine residual listed in the table in section 65529. Commenter 2 suggested it be changed because “a factor of 2.25 has been used in the past (per NSPF) as compared to free chlorine levels.”

Commenter: 2

Response: In regard to commenter 2’s suggestion than the minimum concentration be changed to fit a factor of 2.25, the factor of 2.25 is incorporated in the minimum concentration of bromine. The Initial Statement of Reasons states that “bromine can be used as an alternative disinfectant to chlorine. The bromine equivalent to chlorine is 2.25 times the chlorine level and is reflected in the minimum level proposed.”

Comment: The Department received comments expressing concern over there not being a maximum bromine residual listed in the table in section 65529. In addition, commenter 5 suggested changing the minimum to 6.0 ppm for spas and suggested a

3.0-ppm maximum for pools, because these are in line with the CDC's Model Aquatic Health Code.

Commenters: 2, 4, 5

Response: The Department is not mandating a maximum bromine residual because available research is inconclusive as to the appropriate maximum concentrations for public pools. Adoption of bromine residual concentrations in pools and spas can be considered for future code adoption after a national standard is published. Current language in the regulations allows for other disinfecting materials or methods after the pool operator has demonstrated to the enforcing agent that such materials or methods are at least as effective as the required chlorine concentration and will not cause adverse physiological effects to pool users. No changes will be made to the proposed regulations in response to these comments.

Nor did the Department change the minimum concentration in response to these comments. Although the Model Aquatic Health Code is one resource the Department used in promulgating these regulations, not every one of the model code's provisions fits the needs of California. The ANSI/APSP-11 2009 standard for water quality in public pools and spas for minimum bromine residual concentration is lower than what is set out in this chapter. The minimum bromine residual concentration in this chapter is in between the ANSI-APSP-11 standard and the CDC's Model Aquatic Health Code. A pool operator can maintain bromine residuals at the concentrations suggested by the commenter, because a maximum bromine concentration is not established for this chapter, and so long as the bromine concentration does not create an unhealthful condition.

MINERAL SPRINGS

Comment: Section 65503(b) says that mineral springs pools that meet the fresh water flow exception standard in the California Building Standards Code must be operated in compliance with the public pool regulations in this chapter except for section 65529 and that those mineral springs pools that do not meet the fresh water flow exception must be operated in compliance with *all* regulations in this chapter. A commenter asked whether this provision applies retroactively.

Commenter: 5

Response: Section 65503(b) requires all mineral spring pools that meet the fresh water flow exception standard in section 3123B.1, Title 24, California Building Standards Code, to comply with all the public pool standards in this chapter except for the continuous-disinfection requirements of section 65529 if monthly bacteriological water-quality standards are met according to section 65531, regardless of when the mineral

springs pool was constructed. This chapter's requirements apply to all pools regardless of date of construction. Mineral springs pools that do meet the fresh water flow exception standard shall comply with *all* public pool standards in this chapter and the requirements in Title 24 of the California Building Standards Code. Existing Law limits the application of California Building Standards Code and may not be applied retroactively.

Comment: Commenter 11 stated that the proposed regulations in this chapter include standards for the quality of water that could eliminate the use of geothermal mineral water as a source to supply public pools. The commenter believed that would result in a regulatory taking and would diminish the health benefits achieved by therapeutic geothermal mineral water soaking and bathing.

Commenter: 11

Response: No changes were made in response to this comment. The numerical microbiological water-quality standards in section 65531 that require the use of the standard plate count and multiple-tube fermentation methods for determining the existence of bacteria in pool water are existing requirements. Prior to these amended regulations, if a mineral spring pool met the definition of a public pool, then the preceding referenced microbiological standards applied. The additional methods, the membrane-filtration technique and the enzyme substrate method, are proposed to allow the pool operator a choice in which current technologies to use to determine the presence of bacteria in pool water. To provide clarity that did not previously exist, section 65503(b) establishes a frequency to determine the microbiological quality of a mineral spring pool, to avoid the continuous pool-disinfection requirements of section 65529.

PUBLIC POOL WATER CHARACTERISTICS

Comment: One commenter stated that the required pH is inconsistent with the CDC's recommendations.

Commenter: 16

Response: No changes were made in response to this comment. Section 65530 requires public pool water pH be maintained within a minimum of 7.2 and a maximum of 7.8. This pH range is consistent with the CDC's Model Aquatic Health Code.

Comment: One commenter stated that the CDC recommends chlorine concentrations between 1.0 ppm and 3.0 ppm.

Commenter: 16

Response: No changes were made in response to this comment. The Department agrees with the commenter in that the CDC recommends a free-chlorine concentration between 1.0 ppm and 3.0 ppm. Section 65530(b) reflects these free-chlorine residuals for public pools with a minimum of 1.0 ppm for public pools and 3.0 ppm for public spas, wading pools, and spray grounds, without CYA. For public pools with CYA, the minimum concentration of free-chlorine residual is 2.0 ppm for pools and 3.0 ppm for public spas, wading pools, and spray grounds. Numerous micro-organisms, including *Pseudomonas*, giardia, and *Legionella* have been identified as surviving at the lower concentrations of free-chlorine residual disinfectant currently required in this section. According to the CDC and the World Health Organization, a 2.0-ppm minimum free-chlorine residual will destroy most harmful micro-organisms in pool water. A large majority of public pools in California already operate at a minimum of 2.0 ppm to provide a buffer against the extended periods of sunlight and elevated air temperatures. The increase from a minimum of 1.0 ppm to 2.0 ppm free-chlorine concentration if CYA is used is public health protective, aimed at preventing waterborne illnesses.

Comment: One commenter stated that the 0 ppm minimum in section 65530 is concerning because it is very difficult to maintain a pool with no detectable level of chlorine.

Commenter: 16

Response: No changes were made in response to this comment. The Department interprets this comment to mean that a combined-chlorine concentration of 0.0 ppm in a public pool will be difficult to maintain. 0.0 ppm is not the absolute value required to be maintained in a public pool. A pool owner does not have to maintain 0.0 ppm of combined chlorine in a public pool; the acceptable range proposed in section 65530 is between 0.0 ppm and 0.4 ppm. No changes have been made in response to this comment.

Comment: One commenter stated that bacteria levels described in Title 22 imply that swimming pool water does not need to be sterile to be bacteriologically satisfactory for swimmers.

Commenter: 15

Response: No changes were made in response to this comment. The Department agrees with the commenter. Section 65531 does not require the pool to be sterile but identifies bacteriological water-quality standards required at each public pool site.

Comment: One commenter stated that 4.0 ppm for the minimum bromine residual is a welcome change in that it will help the operator maintain a cleaner pool.

Commenter: 16

Response: No changes were made in response to this comment. The Department appreciates the support.

MISCELLANEOUS COMMENTS

Comment: One commenter asked whether the water-treatment systems must be those used on water supplied for the public pools or whether this definition may be construed to mean water-treatment systems for water used to irrigate land, such as in a park. The commenter requested that these regulations not allow any “gray area” wording that could be misconstrued as permission to treat water without the proper permits and use that water in a way that is beyond the intention of the regulations. The commenter states that she is finding in Los Angeles storm-water capture, stored underground in a park setting, treated in a facility, and then used for irrigation water. The commenter further stated that recycled water is under the jurisdiction of the Los Angeles Department of Water and Power but that, in these cases above, the Los Angeles Bureau of Sanitation, Los Angeles Bureau of Engineering, and Los Angeles Department of Parks have taken authority under their own rules.

Commenter: 19

Response: No changes to the regulation were made in response to comments. The water-treatment systems referred to in section 65525 apply only to pool water that is recirculated and returned to the public pool for recreational use. These regulations do not apply to recycled water used for irrigation.

Comment: One commenter urged the Department to allow more flexibility in the location of operational records contained throughout the regulations and to revise section 65521 to require operational records be located near the pool but in a location that is out of the weather.

Commenter: 16

Response: No changes were made in response to these comments. Section 65521 does not require operational records be stored in a manner that would subject them to the weather. Section 65521 now requires the pool operator to maintain pool-operating procedures and manufacturers’ instructions for the operation and maintenance of all mechanical and electrical equipment and water-treatment systems be at the *public pool site*. Flexibility for record storage already exists in the definition of a “public pool site” in

section 65501. There are ample locations in which to store operational records out of the weather but still at the public pool site, which includes ancillary facilities.

Comment: Commenter 11 wrote that the statement regarding the determination in the Initial Statement of Reasons that no reasonable alternatives exist is unsupported by fact.

Commenter: 11

Response: The Department disagrees with this comment. The regulations are necessary to ensure the health and safety of Californians and others who use public pools. The regulations work to prevent injury, negative health-related consequences, and death. Consequently, it is not an option for the Department to not adopt any regulations. As to regulations that are more or less stringent than those promulgated by the Department, the Department has demonstrated by its responses to comments submitted by the public the reasons these alternatives are not reasonable.

Comment: Commenter 2 requested that section 65546(a)(6)(A) and (B) be amended to state “(or equivalent CT value)” after the values for the free-chlorine concentrations and the times that the concentrations must be maintained during a public pool disinfection.

Commenter: 2

Response: The Department did not make any changes in response to this comment. The Department determined that a standardized response to a fecal, vomit, blood contamination, and near-drowning or drowning incident is a more public-health-protective approach than leaving options available that could introduce human error, such as having to determine other free-chlorine concentrations or closure times with an equivalent contact–time (CT) inactivation value.

Comment: Commenter 8 wanted the regulations to be as consistent as possible with the Model Aquatic Health Code.

Commenter: 8

Response: The Department considered the Model Aquatic Health Code as one of many resources in promulgating these public pool regulations. We incorporated provisions from it where they were consistent with the Department’s concerns with public pool health and safety in California. No changes were made in response to this comment.

Comment: A few commenters had problems with the data cited in the Initial Statement of Reasons that accompanied the initial proposed regulation text. One commenter

stated that the Department has not shown that *Cryptosporidium* infection has occurred at home-owner-association pools and that most of the Department's concerns are with large water parks. Another commenter wrote that the data cited in the Initial Statement of Reasons were not California specific and said national studies indicate waterborne-disease outbreaks in California apartments are rare to nonexistent. The latter commenter said that the CDC study cited in the Initial Statement of Reasons did not show any outbreaks in California apartments. This commenter concluded that the regulations might be appropriate for interactive fountains and waterslide parks but not apartment buildings.

Commenters: 7, 10

Response: *Cryptosporidium* is a microscopic protozoan parasite that causes diarrheal illness called cryptosporidiosis. Water is the most common method that *Cryptosporidium* is spread, including through recreational water. In the United States, *Cryptosporidium* is one of the most frequent causes of waterborne illness among humans. *Cryptosporidium* was responsible for one of the largest waterborne-illness events associated with a treated recreational water venue, involving approximately 2,300 people. *Cryptosporidium* infection is a risk to pool users regardless of the venue. The public pool disinfection requirements in section 65529(b) are public health protective, aimed at preventing recreational waterborne illnesses and outbreaks. No changes have been made in response to this comment.

Comment: Replace "proper" in section 65514(a)(5) and (a)(7) with "required."

Commenters: 2, 5

Response: The Department agrees with the commenters that "proper" is vague and "required" is a better choice of words. The subsections were amended before the additional 15-day notice-and-comment period.

Comment: One commenter suggested we modify the language in section 65539(b) to say, "When lifeguard service is required the pool operator shall provide an adequate number of lifeguards to maintain continuous surveillance." Another commenter suggested a similar change.

Commenters: 3, 14

Response: The Department agrees that the regulation was not clearly worded and amended the text to read, "Where lifeguard service is provided, the pool operator shall ensure lifeguards maintain continuous surveillance of the pool users." It is necessary to use "provided," rather than "required," so that the regulation is inclusive of all public pools at which lifeguards are present. If lifeguard services are provided under any

circumstances, whether they are required by law or not, the result must be that the lifeguards are able to maintain continuous surveillance of all pool users. This requirement is particularly important in waterpark pools that have winding, narrow rivers throughout the park, because lifeguards must be able to see pool users at every turn. The number of lifeguards required to provide continuous surveillance is a pool-specific decision. Given the public's reliance on lifeguards and the inherent safety risks as public pools, no changes were made in response to this comment.

Comment: One commenter noted that section 65539(c), which formerly required that, where no lifeguard was on duty, a sign be placed saying as much, has been amended so that the sign is no longer required. The commenter noted that the Initial Statement of Reasons said this requirement would be placed elsewhere in the regulations and that it has not been. Another commenter noted that the Health and Safety Code requires such a sign and that it is important to have the lifeguard-sign requirement in the Title 22 regulations for liability reasons. This commenter suggested the reinsertion of the language requiring the sign so that all existing signs are in compliance with Title 22.

Commenters: 10, 16

Response: Health and Safety Code section 116045 already requires that at public swimming pools, as defined in that chapter, where no lifeguard is provided, "signs shall be erected clearly indicating that the service is not provided." The Department removed the "No Lifeguard on Duty"-sign requirement because it is a statutory requirement applicable to all public pools regardless of when the pool was constructed. To restate the requirement in this chapter would be duplicative. All existing "No Lifeguard on Duty" signs that complied with former section 65539(c) continue to be required and do not conflict with the amended regulations.

Comment: Two commenters suggested allowing a shorter rescue pole for the spas in section 65540(a)(2). One commenter thought it should be equal to the maximum width of the spa.

Commenters: 2, 5

Response: The Department agrees that the length of the rescue pole may be shorter for spas. A very long rescue pole could be unwieldy and hinder a rescue attempt. Therefore, the Department changed the proposed language prior to the additional 15-day notice-and-comment period. A rescue pole for a spa may be shorter if approved by the enforcing agent. The decision regarding the length of the pole required will be pool specific.

Comment: Two commenters wrote that the definition of “pool user” in section 65501 should be the same as in the California Building Standards Code in Title 24.

Commenters: 3, 13

Response: The Building Standards Code and these public pool regulations were promulgated for different purposes. Although there is much overlap of the two sets of regulations and the text language, not all definitions are the same because the two titles have different aims. Title 24 regulates the construction of pools, and Title 22 regulates the operation of pools. No changes were made in response to these comments.

Comment: Regarding the definition of “enforcement agent” in section 65501(e), one commenter believed it was not specific enough. The commenter thought that the Department’s definition was inconsistent with Health and Safety Code sections 106600, 106605, and 106615(e). This commenter suggested the Department allow local agencies to designate an enforcement agency to enforce environmental health provisions, allowing the agent broad discretion in interpreting and enforcing the Title 22 regulations, including “making minor modifications” to them.

Commenter: 11

Response: The Department does not agree that section 65501(e)’s definition of “enforcement agent” is inconsistent with the Health and Safety Code sections cited. Section 106615(e) specifically says that the “[a]ctivities of registered environmental health specialists shall be regulated by the [California Department of Public Health] upon the recommendation of the [Environmental Health Specialist Registration Committee].” The other two sections cited simply specify how environmental health specialists and environmental health specialist trainees are registered.

With regard to allowing municipalities to designate their own enforcement “agencies,” this cannot be allowed. The Department alone is tasked with ensuring compliance with Title 22 public pool regulations. Further, no one, including state enforcement agents, may broadly interpret and enforce these regulations, much less modify them. These regulations have been promulgated to ensure uniform activity across the state with regard to public pools that will ensure the healthful and safe operation of public pools. Allowing the regulations to be followed or enforced in a non-uniform fashion would defeat the purpose of promulgating the regulations and would put pool users at risk.

Comment: A couple of commenters suggesting removing “and adjust the pH if necessary” in section 65546.

Commenters: 2, 5

Response: The Department agrees that this is redundant and modified the text prior to the additional 15-day notice-and-comment period.

Comment: A commenter suggesting adding “the pool operator shall not return the filter backwash water to the pool” in section 65546.

Commenter: 2

Response: The Department agrees and modified the text prior to the additional 15-day notice-and-comment period.

Comment: A couple of commenters pointed out a typo in section 65527 in which “public operator” should have been “pool operator.”

Commenters: 4, 5

Response: The Department also found this typo and modified the text prior to the additional 15-day notice-and-comment period.

Comment: One commenter suggested using the same definition of “public pool” as the one in the California Building Standards Code in Title 24.

Commenter: 5

Response: The Department disagrees with the commenter that these definitions should be same, because each set of regulations are looking to accomplish different things. For the health and safety of public pool users, the definition in Title 22, section 65501, must differ from that given in the California Building Standards Code.

Comment: One commenter thought that the requirement in section 65521 that all pool operators have manufacturer instructions on hand was not feasible “retroactively.”

Commenter: 5

Response: The Department took this comment to mean that it may not be feasible for all pool operators to have original manufacturer instructions on hand if he or she had already discarded them, particularly when the equipment had been purchased a long time ago. No changes have been made to the regulatory text as a result of this comment because the Department believes that the pool operator needs to have the manufacturer instructions for the pool equipment he or she operates. This is reasonably necessary so that the pool operator can easily refer to the procedures and manuals during daily operations and in an emergency. This is also necessary so that, during investigations, the enforcing agent can compare the written procedures and manuals with the actual practices of the pool operator. It is true that some pool operators may have to locate a new set of instructions, but the Department does not believe this to be a burden that cannot be overcome.

Comment: A commenter suggested adding “ANSI/NSF-50” after “calibrated” in section 65523(a).

Commenter: 5

Response: No changes were made in response to this comment. Equipment installed at a public swimming pool must comply with the California Building Standards Code requirements in Title 24, Chapter 31B. Section 3123B.2 specifies in part that all public pool pumps, filters, chemical feeders, skimmers, and supplemental equipment shall comply with the applicable requirements established by the NSF/ANSI 51-2010 performance standard effective August 2010. To state the ANSI/NSF-50 equipment requirement in this chapter is unnecessary because it is already a requirement included in the California Building Standards Code.

Comment: A commenter suggested striking “written daily” in section 65523(a), which requires a daily log of certain activity.

Commenter: 5

Response: The Department does not believe this is a useful suggestion and has made no changes in response to this comment. All pool operators must keep a daily written record.

Comment: A commenter suggested inserting “accurate” before “test kit” in section 65529(e).

Commenter: 5

Response: No changes to the regulations have been made in response to this comment because it is implicit in the regulation that the test kit being used is accurate. An inaccurate test kit would not serve any purpose, and therefore it is unnecessary to state that the test kit must be accurate.

Comment: One commenter suggested removing “first aid” in section 65540(a).

Commenter: 5

Response: The Department does not agree with this suggestion, and no changes to the text have been made. “First aid” belongs in subsection (a) because subsection (b)(1) requires a first aid kit.

Comment: A commenter suggested replacing “shall be” with “is” in section 65540(a).

Commenter: 5

Response: The Department agrees with this comment and modified the text prior to the additional 15-day notice-and-comment period.

Comment: A commenter requested exempting deck showers from the section 65551 requirement of having to have soap available. The commenter said the soap could get into the pool and contaminate it.

Commenter: 5

Response: The Department agrees with this commenter and modified the text prior to the additional 15-day notice-and-comment period.

Comment: A commenter suggested defining “adverse physiological effects” in section 65529 because the term was “highly subjective.”

Commenter: 6

Response: The Department disagrees that the term is highly subjective and therefore has made no changes in response to this comment. Adverse physiological effects are effects that are problematic and injurious to humans, such as itchy eyes, itchy skin, burning and stinging sensations on the body, problems breathing, etc. The Department believes it is easy to identify what an adverse physiological effect is.

Comment: One commenter was concerned that guest rooms in a hotel could be seen as “ancillary facilities,” given the definition in section 65501.

Commenter: 9

Response: The Department believes the definition of ancillary facilities in section 65501 is clear as currently written and that it would be unreasonable to interpret the definition to include private guest rooms. The definition does not apply to non-pool-related areas. The exact definition of what an ancillary facility is at a specific pool will need to be reasonably determined by the pool operator and the enforcing agent on a site-by-site basis.

Comment: A commenter wrote that the definition of “public pool site” is unclear because “public pool premises” is unclear.

Commenter: 11

Response: The Department believes the definition of public pool site in section 65501 is clear as currently written and that it would be unreasonable to interpret the definition to include non-pool-related areas. No changes to the text have been made in response to this comment.

Comment: A commenter wrote that the definition of “recirculation system” needs additional language that differentiates between primary and secondary recirculation systems. The commenter believed that it should be clear that water features are allowed as long as they are run on a secondary recirculation system and the feature water is returned to the pool’s primary recirculation system for disinfection and treatment.

Commenter: 11

Response: The approval of water features as defined in section 65501 and associated recirculation systems in a public pool is determined by the local enforcing agent in accordance with the authority and construction provision specified in the Building Standards Code (Title 24, Chapter 31B). If a water feature is approved for installation, then the water it recirculates must meet the public pool water standards specified in section 65531 regardless of whether the recirculation system connected to it is considered primary or secondary. No changes were made in response to this comment.

Comment: One commenter suggested that, with regard to the 104° F maximum in section 65530, the Department should allow a 1.5° plus or minus difference to provide for mechanical fluctuation of the measuring device. That is, 105.5° F should be allowed if the machine is set to 104° F.

Commenter: 11

Response: The Department does not believe that allowing for 105.5° F water is healthful or safe and therefore made no revisions in response to this comment. 104° F is the maximum allowable water temperature for a public pool.

Comment: One person wrote in to express support for the proposed amendments.

Commenter: 8

Response: The Department appreciates the comment.

Comment: One commenter wrote in to suggest the Department change the California Building Standards Code regarding projections and recessed areas. This commenter also suggested that language be added to the Building Code that allows for pools and spas to be built next to each other, less than 6 feet apart, when they are in separate rooms or separated by a barrier. The commenter also thought the Building Code requirement regarding how large a spa may be is arbitrary.

Commenter: 11

Response: This comment is irrelevant because it does not relate to the Title 22 regulations being promulgated.

Comment: One commenter wrote in to say that the California Building Standards Code (Title 24 of the California Code of Regulations) is not available online and is expensive to procure.

Commenter: 16

Response: This comment is irrelevant because it does not relate to the Title 22 regulations being promulgated.

LIST OF 45-DAY COMMENTERS

No.	Commenter Organization	Signature
1	KIK Pool Additives	Dana William Somesla
2	San Bernardino County	Jim Nichol
3	Ventura County Department of Public Health	Rebecca Robeson
4	Napa County Department of Planning, Building, and Environmental Science	Stacey M. Harrington
5	Sacramento County	Colleen Maitoza
6	California Building Industry Association and the California Apartment Association	Robert E. Raymer
7	Community Associations Institute–California Legislative Action Committee	Skip Daum
8	California Spa & Pool Industry Education Council	John A. Norwood
9	California Hotel & Lodging Association	Lynn S. Mohrfeld
10	California Political Consulting Group on behalf of the Apartment Association, California Southern Cities; East Bay Rental Housing Association; and Nor Cal Rental Property Association	Ronald M. Kingston
11	Neasham & Kramer LLP	William C. Neasham
12	Chemtura, Biolab Inc.	Roy D. Vore
13	Ventura County Department of Public Health	Rebecca Robeson
14	Isocyanurate Industry Ad Hoc Committee	Thomas Kuelchler, Ph.D.
15	Occidental Chemical Corporation	Thomas Kuelchler, Ph.D.
16	Western Manufactured Housing Communities Association	Sheila S. Dey
17	KIK Pool Additives, Inc.	Greg Wiese
18	Leslie’s Poolmart, Inc.	Mike Jenings
19	Public citizen	Joyce Dillard
20	Kirk Mitchel & Associates, LLC	Kirk Mitchell

ADDENDUM II
15-Day Notice of Public Availability
Summary of Comments and Responses to Comments

The Department received comments from 7 commenters during the 15-day public notice period beginning June 27, 2014, and ending July 14, 2014. The comments below are aggregated and summarized or responded to individually.

Relevant Comments

Comment: One commenter wanted the definition of “pool operator” to include “pool lessee” and a “person the pool owner or pool lessee delegates to conduct pool operation and maintenance.” This commenter believes that where a person is in “legal possession” of a pool and the owner of the pool does not have legal possession of the pool, the lessee should be legally responsible.

Commenter: 2

Response: These regulations cannot cover every possible legal relationship. A pool owner is the person legally entitled to the use of the land on which the pool is located. Thus, the definition of pool operator encompasses such situations. No changes have been made in response to this comment.

Comment: One commenter stated that “[a]lmost every pool and spa is heated” and that section 65523, which mandates heated pools’ water temperature be tested at least once a day, should state that this requirement only applies to those public pools that operate at 95° F or higher.

Commenter: 4

Response: A large amount of public pools are equipped with heaters. However, unless a public pool is using a heater or the source water is from a mineral hot spring, it is not a “heated pool.” Any public pools that are heated must be tested at least once a day to ensure the temperature does not go above 104° F. Also, even if the Department made the suggested change, it would still be necessary to test the water to see whether the water is 95° or higher. No changes were made in response to this comment.

Comment: One commenter wanted the Department to add MRSA (methicillin-resistant *Staphylococcus aureus*) and norovirus in the list of communicable diseases in section 65541. Another commenter recommended adding hantavirus, HIV/AIDS, MRSA,

measles, pertussis, rabies, flu, sexually transmitted disease, tuberculosis, and West Nile virus to the list.

Commenters: 4, 5

Response: The list in section 65541 of communicable disease is not exhaustive. It contains some of the more commonly seen illnesses to result from public pools. The Department does not believe that adding the suggested diseases would be useful. No changes were made in response to this comment.

Comment: A commenter noted that “maintained” had been removed from section 65541(b) but thought it should be there because the pH will need to be lowered and maintained after an event.

Commenter: 4

Response: As currently written, the regulation asserts that a certain pH must be held constant. The word “maintained” was and is unnecessary.

Comment: One commenter wanted the contamination incident reports required in section 65546(b) to include “identification/location of the affected pool.”

Commenter: 7

Response: The regulation already requires the pool operator to include in the incident report which pool was affected (see section 65546(b)(1)), so the added language is not necessary.

Comment: One person commented that “deck showers” in section 65551(b) is not a common term and that the term should be replaced with “showers located on the pool deck.”

Commenter: 7

Response: The Department believes this is a widely known term that is self-descriptive.

Comments Outside the Scope of the 15-Day Public Availability Period

The following comments did not address amendments that were made and submitted to the public for the 15-day notice-and-comment period. These comments address regulation text that was not amended for 15-day public availability. Therefore, the comments are outside the scope of the 15-day public availability and are not answered.

Comment: One commenter noted that because suction outlet covers have expiration dates, section 65545 should contain the addition of the following language: “missing,

broken, or expired suction outlet covers” in the list of things that may require a public pool closure. The commenter also suggested the Department define “expired suction outlet cover.”

Commenter: 1

Comment: A commenter wanted the definition of enforcing agent to include persons delegated by counties or municipalities. The commenter also wanted to give them broad discretion when interpreting and interpreting the regulations and to allow them authority to make “minor modifications” to the provisions.

Commenter: 2

Comment: A commenter wanted the Department to differentiate between “primary” and “secondary recirculation systems in various parts of the regulations.

Commenter: 2

Comment: A commenter wanted the definition of “spa” in 65501 to say that a spa may incorporate a water jet system, an aeration system, or both, in conjunction with nationally or artificially heated water.

Commenter: 2

Comment: A commenter wanted the definition of “special purpose pool” to say that the specific purposes numerated in the definition be such that they are the “primary” purposes and to add “wellness” as one of the purposes. More specifically, this commenter wanted geothermal mineral water pools constructed to be used for therapeutic soaking be classified as special purpose pools and be exempted from pool construction standards.

Commenter: 2

Comment: A commenter suggested the Department require pool operators to maintain manufacturers’ instructions at the public pool site for “at least one year,” but not indefinitely, because that, in the opinion of the commenter, is overly burdensome.

Commenter: 2

Comment: A commenter suggested the Department require pool operators to maintain data and records collected pursuant to section 65523(a) at the public pool site for “at

least one year,” but not two years, because that, in the opinion of the commenter, is overly burdensome.

Commenter: 2

Comment: A commenter wanted the maximum pool water temperature to be 105.5° F, not 104°, if the automated equipment regulating the temperature was set to 104°.

Commenter: 2

Comment: A commenter requested the following language be added to the end of section 65531(b): “except as is normally experienced within the range of standards for chemical levels as set forth within these sections.”

Commenter: 2

Comment: A commenter stated that the Initial Statement of Reasons was mistaken regarding the initial determination that no reasonable alternatives to the regulations promulgated here exist.

Commenter: 2

Comment: A commenter stated that the maximum combined chlorine concentration of 0.4 ppm is impossible to comply with because San Francisco treated city water has a combined chlorine concentration of 0.5 to 3.3 ppm, with an average of 2.2 ppm. Filling a large pool with such water would make compliance impossible.

Commenter: 3

Comment: A commenter noted that no maximum bromine is stated and that the minimum for spas, wading pools, and spray grounds should be 7.0 ppm with a maximum of 22.0 ppm.

Commenter: 4

Comment: “Cyanuric acid is not supposed to be used in high risk water such as spas, wading pools, and spray grounds.” Cyanuric acid should not be used in these venues.

Commenter: 4

Comment: Amend section 65531 to read, “pool users, operators, and lifeguards.”

Commenter: 4

Comment: One commenter thought that the way the regulations are written does not allow for other variations of hyper-chlorinating after a fecal incident. Higher dosages allow a facility to open sooner.

Commenter: 4

Comment: One commenter wrote that section 65551 should require the disinfection of ancillary facilities, not just the “cleaning” of them.

Commenter: 4

Comment: One commenter wrote that section 65523 allowed too much leeway to the enforcing agent because it allows the enforcing agent to determine whether an automatic chemical monitoring and control system may be used.

Commenter: 5

Comment: One commenter wrote that section 65523(c)'s requirement that maximum combined chlorine concentrations be below 0.4 ppm was impossible to comply with in an indoor environment and suggested the Department simply require that combined chlorine be maintained such that it avoids any health and safety issues.

Commenter: 5

Comment: One commenter wrote that the minimum standard for spas, wading pools and spray grounds is too high and should be 1.5 ppm.

Commenter: 5

Comment: One commenter believed that subsections of section 65531(a) should be re-ordered, with the “most important aspect” being listed first “and then the measuring element that determines this.”

Commenter: 5

Comment: A commenter noted that some of the requirements for section 65540 did not make sense for pools with lifeguards because lifeguard industry standards require different items, such as rescue tubes and emergency fanny packs.

Commenter: 5

Comment: A commenter believed that a rescue pole with a permanently attached body hook should be required in section 65540 and that the rescue pole should be as long as is necessary to effectuate a rescue, not necessarily 12 feet in length.

Commenter: 5

Comment: One commenter thought that “Red Cross” should be removed from the first-aid equipment requirement in section 65540.

Commenter: 5

Comment: A commenter thought that section 65540(c) did not address the needs of “lazy rivers” and other non-traditional types of pools.

Commenter: 5

Comment: One commenter thought that “unaided swimming” in section 65540(d) by a lifeguard did not make sense because “all swimming is unaided except swim lessons.”

Commenter: 5

Comment: One commenter believed that near-drowning and drowning incidents were not related to the release of bodily fluids because a rescue does not necessarily cause a fecal or vomit incident to occur.

Commenter: 5

Comment: One commenter suggested removing the requirement that the filter media be replaced after a contamination incident, because it is difficult to do, costly, and there are biohazard-removal protocols to follow, which would, together, force the pool to close for an extended period.

Commenter: 5

Comment: One commenter did not believe the documentation requirement of section 65546 is realistic. The commenter thought that there is no time to get a head count in a large pool and that it is rare to know when a contamination incident has occurred, because of the “phantom pooper.” Only documenting when the incident is discovered is realistic.

Commenter: 5

Comment: One commenter was concerned about there being no requirement to have an operating telephone poolside on which to call emergency services.

Commenter: 6

Comment: One commenter wanted the definition of “public pool” to an enumeration of things that are not public pools, to match the California Building Standards, Title 24, definition.

Commenter: 7

Comment: One commenter wanted the Department to remove section 65503(d) and incorporate it into section 65501(g).

Commenter: 7

Comment: One commenter wanted to add “(directly, or indirectly through an automated chemical feeder)” after “cyanuric acid” in section 65523(b).

Commenter: 7

Comment: One commenter proposed the Department make the bromine residual minimums consistent with the Model Aquatic Health Code.

Commenter: 7

Comment: One commenter suggested “are” for “shall be” in the second sentence of section 65533(a).

Commenter: 7

Comment: One commenter suggested removing “diaper-changing stations” from section 65535 and 65551(a) because diaper-changing stations are not required in the California Building Standards Code, Title 24.

Commenter: 7

Comment: One commenter wanted the removal of the language in section 65541(b) about coughs, cold sores, nasal or ear discharge, or wearing bandages, because it is “overreaching.”

Commenter: 7

Comment: One commenter wanted to substitute “implement” for “item” in section 65546(a)(2).

Commenter: 7

Comment: One commenter wanted the requirement in section 65546(a)(4) that pools be maintained at 77° F or higher to not be as stringent and to say that it is necessary only “as much as practical.”

Commenter: 7

Comment: One commenter wanted section 65546(a)(6)(A) and (B) to provide alternative concentration–time values (CT values).

Commenter: 7

Comment: One commenter wanted section 65546 to not include whether the fecal stool in a contamination incident was formed or diarrheal.

Commenter: 7

Comment: One commenter wanted repealed section 65549 reinstated with some language changes.

Commenter: 7

Comment: One commenter thought that as written section 65551(c) says that hot air blowers shall be provided in dispensing devices.

Commenter: 7

Irrelevant Comments

The following comments are considered irrelevant because they neither address the text and substance of the regulations nor the processes by which they were promulgated.

Comment: A commenter wanted the minimum separation distance between public pools and ancillary facilities at public pool sites to not apply where the area is divided or the pools are separated by walls or partitions.

Commenter: 2

Response: Presumably, this comment is in regard to the California Building Standards Code. Because it is not about the regulations being promulgated here, the comment is irrelevant.

Comment: A commenter suggested many changes to the California Building Standards Code in Title 24.

Commenter: 2

Response: Because this comment is in regard to the California Building Standards Code, not the regulations being promulgated here, it is irrelevant.

LIST OF 15-DAY COMMENTERS

No.	Commenter Organization	Signature
1	The Association of Pool & Spa Professionals	Jennifer Hatfield
2	Neasham & Kramer LLP on behalf of Roman Spa Hot Springs Resort	Erica L. Brinitzer
3	University of San Francisco	Paul Hansen
4	Commercial Pool Systems, Inc.	Steve Dunn
5	Bay Area Public Pool Operators Association	Korey Riley Peter Beireis Peter DeQuincy Alejandra Hernandez Tara Garside Nicholas Cuevas Michelle Dunaway Patty Lorick Tyler Stetson
6	Kings III Emergency Communications	Kyle Hamilton
7	San Bernardino County	Jim Nichol

**ADDENDUM III
 STATEMENTS OF DETERMINATIONS**

ADDITIONAL COMMENT PERIODS

The text as last noticed to the public was not modified; therefore, there will be no additional comment periods.

ALTERNATIVES DETERMINATION

In accordance with Government Code Section 11346.9(a)(4), the Department has determined that no alternatives would be more effective in carrying out the purpose for which the regulation is proposed nor less burdensome to affected private persons than the adopted regulations. Further, there are no more–cost effective alternatives for affected private persons that would be equally effective in implementing the statutory policy.

LOCAL MANDATE DETERMINATION

The Department has determined that the regulation would not impose a mandate on local agencies or school districts, nor are there any costs for which reimbursement is

required by part 7 (commencing with Section 17500) of division 4 of the Government Code, nor are there any other nondiscretionary costs imposed.

IMPACT ON BUSINESS DETERMINATION

The Department has determined that the regulations will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states.

ADDENDUM IV DOCUMENTS RELIED UPON

California Conference of Directors of Environmental Health, Recreational Health Technical Advisory Committee. *Guidelines for Construction and Operation of Spray Grounds*, October 22, 2008. This document is referenced in the Initial Statement of Reasons (ISOR) and is no longer available through the link provided in the ISOR. However, a hard copy of the document is provided for reference in the Rulemaking File.

[Centers for Disease Control and Prevention \(CDC\). The Model Aquatic Health Code \(MAHC\) Release for Final Public Comment, March 2014.](http://www.cdc.gov/healthywater/pdf/swimming/pools/mahc/mahc-complete-draft-CODE-for-2nd-round-of-comments.pdf)

<http://www.cdc.gov/healthywater/pdf/swimming/pools/mahc/mahc-complete-draft-CODE-for-2nd-round-of-comments.pdf>

This document was revised and differs from the version relied upon for the ISOR. Revisions made to this document were relied upon for language in the Final Express Terms and are referenced in the response to comments in the Final Statement of Reasons.