GOVERNMENT OF GUAM
DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES
DIPATTAMENTON SALUT PUPBLEKO YAN SETBISION SUSIAT

LOURDES A. LEON GUERRERO
GOVERNOR, MAGA'HÅGA'

JOSHUA F. TENORIO
LT. GOVERNOR, SIGUNDO MAGA'LÅHI

LINDA UNPINGCO DENORCEY, MPH
DIRECTOR

LAUREN SF DUENAS, MPH, BSN.
DEPUTY DIRECTOR

MAR 21 2019

Honorable Tina Muña Barnes
Speaker, Thirty-Fifth Guam Legislature
Guam Congress Building
163 Chalan Santo Papa
Hagatna, Guam 96921

35GL-19-0269
Speaker Tina Rose Muña Barnes
MAR 26 2019
Time 12:04 AM / PM
Received By:

Via: Secretary of the Legislature
The Honorable Amanda L. Shelton

Dear Speaker Barnes:

This is a transmittal to *I Liheslaturan Guåhan* of the proposed rules and regulations governing public swimming pools pursuant to the Administrative Adjudication Law.

The Division of Environmental Health (DEH) of the Department of Public Health and Social Services (DPHSS) held a public hearing to receive comments from the community on the proposed *Rules and Regulations for Public Swimming Pools*, which is enclosed with this letter. The public hearing was held on October 18, 2018 from 3:00 p.m. to 5:00 p.m. The procedures provided in the Administrative Adjudication Law (Title 5 GCA Chapter 9, Article 3) were followed in notifying and conducting the hearing. Two individuals from the public attended the hearing and each provide oral testimony. No written testimony was received by our office after the public hearing. The minutes of the public hearing is also enclosed.

2019 MAR 26 PM 12:55

The proposed rules and regulations were posted on the website of DPHSS (www.dphss.guam.gov) on October 3, 2018, accompanied by press releases seeking public comments on the proposal. Ten copies of the proposed rules and regulations have been on file at the DEH since its posting.

The Department anticipate an economic impact of over $500,000 to the general public as a result of the implementation of the *Rules and Regulations for Public Swimming Pools*. The determination of economic impact is strictly confined to the implementation of these regulations.

The proposal was reviewed by the Office of the Attorney General and approved by the Governor of Guam (copy enclosed).

A copy of the letter posted on the webpage of the Compiler of Laws, which states, "Compliance with the recommended format will be de facto indication that the submission is in a format approved by the Complier of Laws," is also enclosed. The proposal is in compliance with the recommended format.

We have further enclosed the following materials for your reference:

0269

- A copy of the public hearing notice that was printed in the Guam Daily Post on September 30, 2018 and October 4, 2018;
- Copies of the proposed *Rules and Regulations for Public Swimming Pools* and the accompanying Economic Impact Statement, as well as an electronic copy;
- A copy of the Minutes, as well as an audio copy of the administrative public hearing that was conducted on October 18, 2018;
- A copy of the Summary of Revisions made to the proposed regulations after the public hearing;
- A copy of the letter regarding format from the Office of the Compiler of Law;
- A copy of the memo of approval from the Office of the Attorney General; and
- A copy of the letter of approval from the Governor of Guam.

For any questions you may have in this matter, please contact Mr. M. Thomas Nadeau, the Chief Environmental Public Health Officer of the Division of Environmental Health, at 735-7221, or via his email at masatomo.nadeau@dphss.guam.gov.

Senseramente,

LINDA UNPINGCO DENORCEY, MPH
Director

Enclosures

Cc: DIR Chrono/DEH Chrono/BIE Copy/LN Copy
Duenas 3/22/19

PUBLIC HEARING NOTICE PRINTED IN THE GUAM DAILY POST ON SEPTEMBER 30, 2018 AND OCTOBER 4, 2018

Motions heard in $2.5M meth case; trial set for Oct. 11

By Louella Losinio
louella@postguam.com

Before heading into a second trial next week, District Court Chief Judge Frances Tydingco-Gatewood heard several motions on a high-profile $2.5 million methamphetamine case. One of the motions asks the court to drop count one of the indictment, which charges the defendants with conspiracy to distribute the drug.

Raymond Martinez and Juanita Moser are accused of conspiring to distribute meth in what authorities have described as the largest seizure of its kind on the island.

The defendant's first jury trial concluded May 21, during which Martinez and Moser pleaded not guilty to the charges. Tydingco-Gatewood declared a mistrial after jurors said they were unable to reach a unanimous verdict and declared themselves "hopelessly deadlocked."

The retrial for the two defendants is scheduled to commence on Oct. 11.

Parties involved in the case appeared Wednesday in the District Court of Guam to argue several motions.

Attorneys David Lujan and Peter Perez, on behalf of the defendants, filed a motion for the court to order striking one count in the second superseding indictment. The defense filed the motion "on the ground that evidence at the first trial has established a material variance, or alternatively, a constructive amendment, of the indictment that renders count one fatally defective as a matter of law."

Count one charges defendants Moser and Martinez with conspiracy to distribute meth.

'Idle chatter'

Attorney Gregory Nicolaysen, another defense counsel, argued that the two defendants did not conspire with former Guam Customs and Quarantine Agency Lt. Henry Alvendia about their alleged plans to smuggle drugs into Guam.

Nicolaysen participated in the hearing by telephone and argued that the taped conversations between Alvendia and the two defendants were "idle chatter."

"It is not the same as forming a criminal agreement," Nicolaysen said.

Frederick Black, an assistant U.S. attorney, said the matter refers to the conspiracy between defendants Moser and Martinez.

The government did not take a strong position on whether Alvendia did or did not join the conspiracy to avoid confusing the jury during the first trial, according to Black.

Alvendia had agreed to cooperate as an informant for the government in the case.

Background

Martinez and Moser were arrested in 2015 after being accused of conspiring to bring 8 pounds of meth to Guam from California.

The arrest followed weeks of recorded contact between Martinez, Moser, and Alvendia, about their alleged "elaborate" plans to smuggle the drugs to the island.

Alvendia was charged with receiving bribes and kickbacks while he worked for the government and agreed to cooperate with federal authorities in exchange for a lighter sentence.



DEFENDANTS: *Raymond Martinez and Juanita Moser walk into the District Court of Guam in May. They are accused of conspiring to bring 8 pounds of methamphetamine from California to Guam in 2015. During their upcoming retrial, they're asking for the conspiracy charge to be dropped.*
Norman M. Taruc/The Guam Daily Post

TENORIO continued from page 1

although he would be within the next 24 hours.

"My priorities are the people of Guam," said Tenorio in explaining why he did not appear in court.

He said he was meeting with the remaining two families still sheltered at the Astumbo gym in the wake of Typhoon Mangkhut.

Tenorio, who is the Republican gubernatorial nominee, dismissed the suggestion that he ducked out of the arraignment in order to avoid images of him appearing before a judge in the midst of his campaign for governor of Guam.

"No. Being here is second nature," he said outside the probation office. "I was a police officer for many years" and "I used to testify in this same exact court," he said.

When asked if he could have scheduled the visit to the shelter on another day in order to attend his arraignment, which took about 15 minutes, he said, "I beg to differ. ... It came to a head. At the end of the day, I'm responsible for these folks."

The hearing

During the hearing, the judge disclosed that his chamber clerk and her husband are friends or have worked with several of the potential witnesses in the case. He also said members of his clerk's family have been actively campaigning for Tenorio.

Sison said he did not believe that should disqualify him from the case and neither side objected to having him preside over the trial.

The charges against Tenorio were filed by Assistant Attorney General James Collins. However, chief prosecutor Joseph McDonald appeared in court Wednesday on behalf of the government because Collins was off island.

McDonald said Collins would try the case. He asked the judge to require Tenorio to report to the Hagåtña police precinct within 72 hours for processing and fingerprinting.

Fisher objected, saying "there is no need for it" and the lieutenant governor "was not arrested." He said it wasn't a normal procedure for the attorney general to ask for processing on misdemeanor charges. "Certainly not in the last 20 years," he said.

McDonald also asked "for release on a $1,000 personal recognizance bond, weekly reporting (to) probation, no guns or alcohol, random testing" and an order for Tenorio to stay away from the witnesses in the case.

"The lieutenant governor of Guam is obviously not going anywhere," said Fisher, who argued that no bail was necessary and there was no need for Tenorio to report to probation on a weekly basis. "It's entirely unnecessary," he said.

Fisher also said Tenorio should not be restricted from consuming alcohol, saying, "There is no indication that he was inebriated or drunk, just the opposite."

Sison set no bail terms, saying, "I will not require a PR bond." He ordered that Tenorio report to probation within the next 24 hours for processing and ordered the lieutenant governor to report to the probation office once a month, by telephone.

"I will not make any prohibition with respect to alcohol," the judge said.

The gun grab

Tenorio has admitted to having consumed "two or three beers" when he approached a uniformed on-duty police officer from behind and removed the officer's service revolver from its holster, saying it did not appear to be securely fastened. He said he acted in the interest of public safety and maintains he did not commit a crime.

However, the complaint filed by the attorney general against Tenorio on Sept. 17 tells a different story.

In that complaint, Sgt. Carl Cruz, whose gun was grabbed, states that his firearm was "properly holstered." He accused Tenorio of trying to seize his handgun on six occasions that night. He said Tenorio "reeked of alcohol and that his face was red." Several other officers who witnessed the incident filed similar statements.

GUAM HOUSING AND URBAN RENEWAL AUTHORITY

Board of Commissioners Meeting
12:00 P.M., Thursday, October 11, 2018
GHURA Main Office
1st Floor Conference Room
117 Bien Venida Avenue, Sinajana

For special accommodation, contact Ms. Kathy Taitano
Tele No. 475-1322 or TTY #472-3701

GOVERNMENT OF GUAM
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123 CHALAN KARETA,MANGILAO, GUAM 96913-6304

EDDIE BAZA CALVO
GOVERNOR
RAY TENORIO
LIEUTENANT GOVERNOR

LEO G. CASIL
ACTING DIRECTOR

NOTICE OF PUBLIC HEARING

PURSUANT TO § 9301, DIVISION 1, CHAPTER 9 TITLE 5 GCA, ALL AGENCIES OF THE GOVERNMENT OF GUAM ARE REQUIRED TO PUBLISH A NOTICE OF PUBLIC HEARING ON THE ADOPTION, PROMULGATION, REPEAL, RECISSION, OR AMENDMENT OF RULES. THE DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES WILL BE ACCEPTING PUBLIC COMMENTS ON THE PROMULGATION OF RULES AND REGULATIONS GOVERNING THE FOLLOWING:

PUBLIC SWIMMING POOL

DATE: Thursday, October 18, 2018
TIME: 3:00 P.M. TO 5:00 P.M.
PLACE: DIVISION OF SENIOR CITIZENS CONFERENCE ROOM, CASTLE MALL, MANGILAO

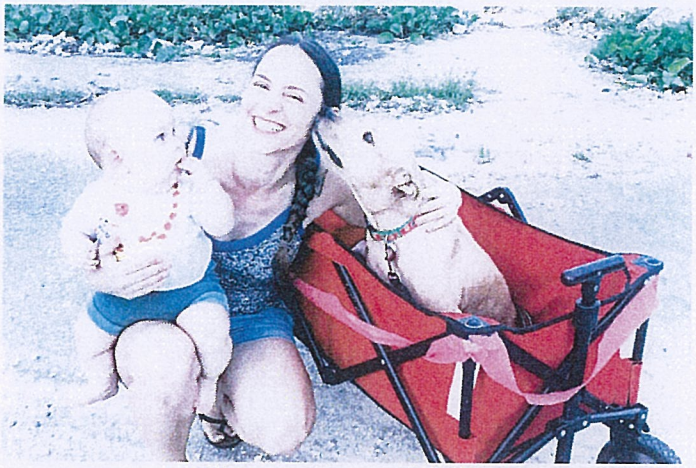
Copies of the proposed rules and regulations are available for inspection at the Division of Environmental Health (DEH) on the 2nd floor of the Department of Public Health and Social Services in Mangilao, and on the DPHSS webpage at dphss.guam.gov. Please call DEH at 735-7221 for questions and assistance.

/s/ LEO G. CASIL
Acting Director

Doc. No. 35GL-19-0269.

Paralyzed miracle dog gets happy ending

By Meghan Swartz
meghan@postguam.com



MAMA DOG: *Arwen Niles and her son Phineas are shown with Mama Dog, which Niles and her husband Matt Herrygers have fostered for the past two months. On Sept. 26, Mama Dog flew out of Guam, bound for Connecticut, where she'll live with a new foster parent and receive medical treatment. Meghan Swartz/The Guam Daily Post*

> "If it's a matter of resources, then I say, why not try to get them? If you get them, perfect. And if you don't? Again, the animal's not any worse off than if you hadn't tried."
>
> – *Arwen Niles*

On a rainy day in early August, Arwen Niles loaded a paralyzed dog and her two puppies found near the airport into the back of her car. She didn't know what could be done to help them, nor that the paralyzed dog – soon christened Mama Dog – would end up staying with her family of three for two months. In those first moments, she just knew she could do something.

Now, nearly eight weeks later, Mama Dog's journey on Guam will end where it began: the A.B. Won Pat International Airport. On Sept. 26, Mama Dog was on an early flight to Hartford, Connecticut, where she'll receive medical care not available on island and settle into a temporary home with a foster parent who Niles said can't wait to meet her.

Before Mama Dog's flight, Niles held a final get-together at Asan Beach Park on Sept. 24, where a small group of Mama Dog's biggest supporters gathered to say goodbye to the friendly, smiling dog, sitting calmly in a red wagon decorated with pink streamers.

Among the group were Niles' husband, Matt Herrygers, without whom Niles said she couldn't have given Mama Dog the care she needed; Tracilynn Kantrud, who organized a paddleboarding fundraiser that brought in $260; Tristi Ah Mu, who organized a GoFundMe campaign that raised more than $6,500; and Amber Fake, who watched Niles' own dog so that Niles and Herrygers could better care of Mama Dog.

Ah Mu brought along a sign to the gathering, which read, "At first they will ask why you're doing it. Later they'll ask how you did it."

Uphill battle

Early on, Niles faced criticism from some who thought Mama Dog should be euthanized and was told by several local veterinarians that they could not help the dog, whose spine appeared to have been fractured, and that the care she needed was not available on Guam.

But Niles refused to give up.

"In the end, the conversation I had with the vet was that it was basically a matter of resources," Niles said. "And if it's a matter of resources, then I say, why not try to get them? If you get them, perfect. And if you don't? Again, the animal's not any worse off than if you hadn't tried."

Two months later, Niles and Mama Dog's other supporters have done all they can – Ah Mu's GoFundMe campaign and a separate PayPal campaign collectively raised more than $10,000 to help cover Mama Dog's travel and medical costs, as well as a donation to PAWS New England, the humane society that will ultimately take responsibility for Mama Dog's care.

In the past weeks, Niles has watched Mama Dog come back to life and has even seen some movement in her back legs. At this point, Niles said, the worst-case scenario is that Mama Dog will use a wheelchair and be pain-free for the rest of her life. But there may be a chance she could walk again.

After many ups and downs, Niles, herself a new mother, is tired. But she says it was all worth it.

"We'll be fine," she said of her family, as they look forward to having a bit more time on their hands after Mama Dog flies out. Years from now, Niles said, the ups and downs of helping the paralyzed pup won't matter when she knows Mama Dog was given the chance to find a forever home and live a full life.

Shortly after taking in Mama Dog, Niles launched a Facebook page as a means of keeping her supporters updated and sharing the dog's story. Over time, the page garnered support for other island dogs in need of foster and forever homes, with 956 people following Mama Dog's story to date.

But even as little as three weeks ago, Mama Dog's future remained uncertain.

In early September, Women United for Animal Welfare – a Los Angeles, California-based humane society – agreed to take in Mama Dog but had no foster home available. It wasn't until weeks later that WUFAW was able to locate a foster parent on the opposite coast, through PAWS New England.

Niles said that in a way, the wait was worth it. Over the past two months, she noted, multiple people offered to foster Mama Dog but ultimately backed out.

"We couldn't have dreamed up a better plan for her," Niles said in her latest Facebook update. "Talk about ending up in the perfect hands!"

Niles said the foster parent, a former vet tech who has wheelchair-bound dogs at home, is the first person she's talked to who has been excited to take Mama Dog into their home.

Island inspiration

Now that Niles knows what's possible, she hopes Mama Dog's story will inspire others to take action and relieve suffering when they see it.

Thanks to social media, Mama Dog's story was shared across territories, states and oceans. Posts from Mama Dog's Facebook page alone have been shared more than 800 times and viewed more than 30,000 times.

"I hope that somebody would see this and say, well crazier things have happened. Somebody's done it so maybe this is possible – let's just see," Niles said. "There's people out there that will help. I think the resources are around, if you fight for them."

"It will have taken exactly (eight) weeks by the time she boards her flight, and the task (was) monumental," Niles wrote in her last Facebook post. "But we finally did it. Thank you to everyone who had a hand in saving this sweet girl's life. Mama Dog's miracle is all yours."

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/s/ LEO G. CASIL
Acting Director

The Guam Energy Office will hold a public hearing to discuss Plug-In Electric Vehicle Program procedure updates on **Wednesday, October 3, 2018 from 2:00 pm – 4:00 pm** at the Guam Energy Office, 548 N. Marine Corps Drive, Tamuning.

Doc. No. 35GL-19-0269.

DRAFT PROPOSED RULES AND REGULATIONS FOR PUBLIC SWIMMING POOLS DATED DECEMBER 31, 2018 AS SUBMITTED TO THE OFFICE OF THE GOVERNOR

RULES AND REGULATIONS FOR PUBLIC SWIMMING POOLS

Article 6
26 Guam Administrative Rules and Regulations
Division 1
Chapter 4

DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES
DIVISION OF ENVIRONMENTAL HEALTH
123 Chalan Kareta
Mangilao, Guam 96913-6304
(671) 735-7221

12.31.18

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§4601. Purpose.

The purpose of these rules and regulations is to repeal and replace existing rules and regulations of the Department of Public Health and Social Services that govern PUBLIC SWIMMING POOL sanitation for safeguarding public health and providing BATHERS a swimming environment that is safe and conducive to good health. The Model Aquatic Health Code was utilized in the development of these rules and regulations.

§4602. Authority.

Title 10 Guam Code Annotated (GCA), Chapter 21, Section 21102 authorizes the DIRECTOR of the Department of Public Health and Social Services to establish rules and regulations to carry out the provisions of Chapter 29, Title 10 GCA.

§4603. Title.

These rules and regulations shall be known as the *"Rules and Regulations for Public Swimming Pools."*

§4604. Definitions.

(a) *Agitated Water* means a PUBLIC SWIMMING POOL with mechanical means to discharge, spray, or move the water's surface above and/or below the static water line of the PUBLIC SWIMMING POOL. Where there is no static water line, movement shall be considered above the deck plane.

(b) *Backflow* means a hydraulic condition caused by a difference in water pressure that causes an undesirable reversal of the flow as the result of a higher pressure in the system than in its supply.

(c) *Barrier* means an obstacle intended to prevent direct access from one point to another.

(d) *Bather* means a person at a PUBLIC SWIMMING POOL who has contact with water either through spray, or partial or total immersion. The term BATHER as defined, also includes staff members, and refers to those users who can be exposed to contaminated water, as well as potentially contaminate the water.

(e) *Chemical Storage Space* means a space in a PUBLIC SWIMMING POOL facility used for the STORAGE of POOL chemicals such as acids, salt, or corrosive or oxidizing chemicals.

(f) *Chlorine* means an element that at room temperature and pressure is a heavy greenish yellow gas with a characteristic penetrating and irritating smell; it is extremely toxic. It can be compressed in liquid form and stored in heavy steel tanks. When mixed with water, CHLORINE gas forms hypochlorous acid, the primary CHLORINE-based disinfecting agent, hypochlorite ion, and hydrochloric acid. Hypochlorous acid dissociation to hypochlorite ion is highly pH dependent. CHLORINE is a general term which refers to hypochlorous acid and hypochlorite ion in aqueous solution derived from CHLORINE gas or a variety of CHLORINE-based disinfecting agents.

(1) *Available Chlorine* means the amount of CHLORINE in the +1 oxidation state, which is the reactive, oxidized form. In contrast, chloride ion *(Cl^-)* is in the -1 oxidation state, which is the inert, reduced state. AVAILABLE CHLORINE is subdivided into Free Available CHLORINE and Combined Available CHLORINE. POOL chemicals containing AVAILABLE CHLORINE are both oxidizers and disinfectants. Elemental CHLORINE *(Cl_2)* is defined as containing 100% AVAILABLE CHLORINE. The concentration of AVAILABLE CHLORINE in water is normally reported as mg/L (ppm) "as Cl_2," that is, the concentration is measured on a Cl_2 basis, regardless of the source of the AVAILABLE CHLORINE.

(2) *Combined Chlorine* means that portion of the total residual CHLORINE that is combined with ammonia or nitrogen compounds and will not react with undesirable or pathogenic organisms.

(3) *Free Chlorine Residual,* or *Free Available Chlorine (FAC),* means the portion of the total AVAILABLE CHLORINE that is not "combined chlorine" and is present as hypochlorous acid *(HOCl)* or hypochlorite ion *(OCl^-)*. The pH of the water determines the relative amounts of hypochlorous acid and hypochlorite ion. HOCl is a very effective bactericide and is the active bactericide in POOL water. OCl^- is also a bactericide, but acts more slowly than HOCl. Thus, CHLORINE is a more effective bactericide at low pH than at high pH. A FREE CHLORINE RESIDUAL must be maintained for adequate DISINFECTION.

(g) *Contaminant* means a substance that soils, stains, corrupts, or infects another substance by contact or association.

(h) *Critical Item* means a provision of this rules and regulations, that, if in noncompliance, is more likely than other violations to contribute to contamination, illness, or environmental health hazard.

(i) *Cross-Connection* means a connection or arrangement, physical or otherwise, between a potable water supply system and a PLUMBING FIXTURE, tank, receptor, equipment, or device, through which it may be possible for non-potable, used, unclean, polluted and contaminated water, or other substances to enter into a part of such potable water system under any condition.

(j) *CT Inactivation Value, or CT Value*, means a representation of the concentration of the disinfectant (C) multiplied by time in minutes (T) needed for inactivation of a particular CONTAMINANT. The concentration and time are inversely proportional; therefore, the higher the

concentration of the disinfectant, the shorter the contact time required for inactivation. The CT VALUE can vary with pH or temperature change so these values must also be supplied to allow comparison between values.

(k) *Deck* means surface areas serving the PUBLIC SWIMMING POOL, including the dry DECK, perimeter/wet DECK, and POOL DECK.

(1) *Perimeter Deck* means the hardscape surface area immediately adjacent to and within four feet of the edge of the PUBLIC SWIMMING POOL; also known as the "wet deck" area.

(2) *Pool Deck* means the surface areas serving the PUBLIC SWIMMING POOL, beyond PERIMETER DECK, which is expected to be regularly trafficked and made wet by BATHERS.

(l) *Department* means the Guam Department of Public Health and Social Services.

(m) *Diaper-Changing Station* means a hygiene station that includes a diaper-changing unit, handwashing sink, soap and dispenser, a means for drying hands, trash receptacle, and disinfectant products to clean after use.

(n) *Diaper-Changing Unit* means a diaper-changing surface that is part of a DIAPER-CHANGING STATION.

(o) *Director* means the Director of the Department of Public Health and Social Services or his/her designated representative.

(p) *Disinfection* means a treatment that kills or irreversibly inactivates microorganisms (e.g., bacteria, viruses, and parasites); in water treatment, a chemical (commonly CHLORINE, chloramine, or ozone) or physical process (e.g., ultraviolet radiation) can be used.

(q) *Enclosure* means an uninterrupted constructed feature or obstacle used to surround and secure an area that is intended to deter or effectively prevent unpermitted, uncontrolled, and unfettered access. It is designed to resist climbing and to prevent passage through it and under it.

(r) *Equipment Room* means a space intended for the operation of POOL pumps, filters, heaters, and controllers. This space is not intended for the STORAGE of hazardous POOL chemicals.

(s) *Flat Water* means a PUBLIC SWIMMING POOL in which the water line is static except for movement made by users.

(t) *Flume* means the riding channels of a WATERSLIDE which accommodate riders using or not using mats, tubes, rafts, and other transport vehicles as they slide along a path lubricated by a water flow.

(u) *Foot Bath* means standing water in which BATHERS or PUBLIC SWIMMING POOL staff rinse their feet.

(v) *Ground-Fault Circuit Interrupter or GFCI* means a device for protection of personnel that de-energizes an electrical circuit or portion thereof in the event of excessive ground current.

(w) *Handwashing Station* means a location which has a handwashing sink, adjacent soap with dispenser, hand drying device or paper towels and dispenser, and trash receptacle.

(x) *Hot Water* means a PUBLIC SWIMMING POOL with a water temperature over 90°F.

(y) *Hygiene Facility* means a structure or part of a structure that contains toilet, SHOWER, DIAPER-CHANGING UNIT, HANDWASHING STATION, and dressing capabilities serving BATHERS and PATRONS at a PUBLIC SWIMMING POOL.

(z) *Imminent Health Hazard* means a significant threat or danger to health that is considered to exist when there is evidence sufficient to show that a product, practice, circumstance,

or event creates a situation that requires immediate correction or cessation of operation to prevent injury based on the number of potential injuries, and the nature, severity, and duration of the anticipated injury.

(aa) *Indoor Swimming Pool* means a physical place that contains one or more PUBLIC SWIMMING POOL and the surrounding BATHER and spectator/stadium seating areas within a structure that meets the definition of "Building" per the International Building Code. It does not include equipment, chemical STORAGE, or BATHER hygiene rooms or any other rooms with a direct opening to the PUBLIC SWIMMING POOL facility. Otherwise known as a natatorium.

(ab) *Inlet* means wall or floor fittings where treated water is returned to the POOL.

(ac) *Lazy River* means a channeled flow of water of near-constant depth in which the water is moved by pumps or other means of propulsion to provide a river-like flow that transports BATHERS over a defined path. A LAZY RIVER may include play features and devices. A LAZY RIVER may also be referred to as a tubing POOL, leisure river, leisure POOL, or a current channel.

(ad) *Oocyst* means the thick-walled, environmentally resistant structure released in the feces of infected animals that serves to transfer the infectious stages of sporozoan parasites (e.g., Cryptosporidium) to new hosts.

(ae) *Patron* means a BATHER or other person or occupant at a PUBLIC SWIMMING POOL who may or may not have contact with PUBLIC SWIMMING POOL water either through partial or total immersion. PATRONS may not have contact with PUBLIC SWIMMING POOL water, but could still be exposed to potential contamination from the PUBLIC SWIMMING POOL facility air, surfaces, or aerosols.

(af) *Perimeter Gutter System, or Perimeter Overflow System (POS),* means the alternative to SKIMMERS as a method to remove water from the POOL's surface for treatment. The gutter provides a level structure along the POOL perimeter versus intermittent SKIMMERS.

(ag) *Person* means any person, firm, partnership, association, corporation, company, governmental agency, club or organization of any kind.

(ah) *pH* means the negative log of the concentration of hydrogen ions. When water ionizes, it produces hydrogen ions *(H^+)* and hydroxide ions *(OH^-)*. If there is an excess of hydrogen ions the water is acidic. If there is an excess of hydroxide ions the water is basic. pH ranges from 0 to 14. Pure water has a pH of 7.0. If pH is higher than 7.0, the water is said to be basic, or alkaline. If the water's pH is lower than 7.0, the water is acidic. As pH is raised, more ionization occurs and CHLORINE disinfectants decrease in effectiveness.

(ai) *Plumbing Fixture* means a receptacle, fixture, or device that is connected to a water supply system or discharges to a drainage system or both and may be used for the distribution and use of water; for example: toilets, urinals, SHOWERS, and hose bibs. Such receptacles, fixtures, or devices require a supply of water; or discharge liquid waste or liquid-borne solid waste; or require a supply of water and discharge waste to a drainage system.

(aj) *Public Swimming Pool* means any SWIMMING POOL that is available for public use, whether for a fee or free of charge, or any SWIMMING POOL used by any business, partnership, corporation or PERSON for the use of their customers, clients, guests or employees including, but not limited to: a commercial POOL; a community POOL or POOL at a hotel, motel, resort, auto park, trailer park, apartment house, or other multiple rental unit; private club; public club; and public or private school, gymnasium, or health establishment.

(ak) *Qualified Lifeguard* means an individual who has successfully completed a lifeguard training course offered by a training agency recognized by the DEPARTMENT, holds a current certificate for such training, has met the pre-service requirements, and is participating in continuing in-service training requirements of the PUBLIC SWIMMING POOL facility.

(al) *Qualified Operator* means an individual responsible for the operation and maintenance of the water and air quality systems and the associated infrastructure of the PUBLIC SWIMMING POOL facility, and who has successfully completed a recognized operator training course to operate a PUBLIC SWIMMING POOL offered by a recognized training agency, and holds a current certificate for such training.

(am) *Recessed Steps* means a way of ingress/egress for a POOL similar to a ladder but the individual treads are recessed into the POOL wall.

(an) *Recirculation System* means the combination of the main drain, gutter or SKIMMER, INLETS, piping, pumps, controls, surge tank or balance tank to provide POOL water recirculation to and from the POOL and the treatment systems.

(ao) *Runout* means that part of a WATERSLIDE where riders are intended to decelerate and/or come to a stop. The RUNOUT is a continuation of the WATERSLIDE FLUME surface.

(ap) *Safety* (as it relates to construction items) means a design STANDARD intended to prevent inadvertent or hazardous operation or use (i.e., a passive engineering strategy).

(aq) *Sanitize* means reducing the level of microbes to that considered safe by public health STANDARDS (usually 99.999%). This may be achieved through a variety of chemical or physical means including chemical treatment, physical cleaning, or drying.

(ar) *Saturation Index* means a mathematical representation or scale representing the ability of water to deposit calcium carbonate, or dissolve metal, concrete or grout.

(as) *Secondary Disinfection Systems* means those DISINFECTION processes or systems installed in addition to the STANDARD systems required on all PUBLIC SWIMMING POOLS, which are required to be used for increased risk PUBLIC SWIMMING POOLS.

(at) *Shower* means a device that sprays water on the body.

(1) *Cleansing Shower* means a SHOWER located within a HYGIENE FACILITY using warm water and soap. The purpose of these SHOWERS is to remove CONTAMINANTS including perianal fecal material, sweat, skin cells, personal care products, and dirt before BATHERS enter the PUBLIC SWIMMING POOL.

(2) *Rinse Shower* means a SHOWER typically located in the POOL DECK area with ambient temperature water. The main purpose is to remove dirt, sand, or organic material prior to entering the PUBLIC SWIMMING POOL to reduce the introduction of CONTAMINANTS and the formation of DISINFECTION by-products.

(au) *Skimmer* means a device installed in the POOL wall whose purpose is to remove floating debris and surface water to the filter. They shall include a weir to allow for the automatic adjustment to small changes in water level, maintaining skimming of the surface water.

(av) *Slide* means a PUBLIC SWIMMING POOL feature where users slide down from an elevated height into water.

(1) *Drop Slide* means a SLIDE that drops BATHERS into the water from a height above the water versus delivering the BATHER to the water entry point.

(2) *Pool Slide* means a SLIDE having a configuration as defined in The Code of Federal Regulations *(CFR)* Chapter II, Title 16, Part 1207 by CSPC, or is similar in construction to a playground slide used to allow users to slide from an elevated height to a

POOL. They shall include children's (tot) SLIDES and all other non-FLUME SLIDES that are mounted on the POOL DECK or within the basin of a PUBLIC SWIMMING POOL.

(3) *Waterslide* means a SLIDE that runs into a LANDING POOL or RUNOUT through a fabricated channel with flowing water.

(aw) *Spa* means a structure intended for either warm or cold water where prolonged exposure is not intended. SPA structures are intended to be used for bathing or other recreational uses and are not usually drained and refilled after each use. It may include, but is not limited to, hydrotherapy, air induction bubbles, and recirculation.

(ax) *Standard* means something established by authority, custom, or general consent as a model or an example.

(ay) *Storage* means the condition of remaining in one space for one hour or more. Materials in a closed pipe or tube awaiting transfer to another location shall not be considered to be stored.

(az) *Substantial Alteration* means the alteration, modification, or renovation of a PUBLIC SWIMMING POOL where the total cost of the work exceeds 50% of the replacement cost of the PUBLIC SWIMMING POOL.

(ba) *Swimming Pool, or Pool,* means any artificial structure, basin, chamber, or tank constructed of impervious material used or intended to be used for swimming, diving, or recreational bathing. It does not include conventional bathtubs where the primary purpose is the cleaning of the body, or individual therapeutic tubs.

(1) *Diving Pool* means a PUBLIC SWIMMING POOL used exclusively for diving.

(2) *Landing Pool* means a PUBLIC SWIMMING POOL or designated section of a PUBLIC SWIMMING POOL located at the exit of one or more WATERSLIDE FLUMES. It is the

body of water intended and designed to receive a BATHER emerging from the FLUME for the purpose of terminating the slide action and providing a means of exit to a DECK or walkway area.

(3) *Skimmer Pool* means a POOL using a SKIMMER system.

(4) *Surf Pool* means any POOL designed to generate waves dedicated to the activity of surfing on a surfboard or analogous surfing device commonly used in the ocean and intended for sport, as opposed to general play intent for WAVE POOLS.

(5) *Therapy Pool* means a POOL used exclusively for aquatic therapy, physical therapy, and/or rehabilitation to treat a diagnosed injury, illness, or medical condition, wherein the therapy is provided under the direct supervision of a licensed physical therapist, occupational therapist, or athletic trainer. This could include wound patients or immunocompromised patients whose health could be impacted if there is not additional water quality protection.

(6) *Wading Pool* means an artificial basin, chamber, or tank constructed of impervious material used, or intended to be used, for wading by small children and having a maximum depth not to exceed 18 inches at the deepest point and not more than 12 inches in depth at the side walls.

(7) *Wave Pool* means any POOL designed to simulate breaking or cyclic waves for purposes of general play. A WAVE POOL is not the same as a SURF POOL, which generates waves dedicated to the activity of surfing on a surfboard or analogous surfing device commonly used in the ocean and intended for sport as opposed to general play intent for WAVE POOLS.

(bb) *Theoretical Peak Occupancy* means the anticipated peak number of BATHERS in a PUBLIC SWIMMING POOL, or the anticipated peak number of occupants of the DECKS of a PUBLIC SWIMMING POOL facility. This is the lower limit of peak occupancy to be used for design purposes for determining services that support occupants. THEORETICAL PEAK OCCUPANCY is used to determine the number of SHOWERS. For PUBLIC SWIMMING POOL, the THEORETICAL PEAK OCCUPANCY is calculated around the type of water use or space.

(bc) *Turnover, or Turnover Rate,* means the period of time, usually expressed in hours, required to circulate a volume of water equal to the capacity of the PUBLIC SWIMMING POOL.

(bd) *Variance* means a written document issued by the DIRECTOR, not his/her representative, that authorizes a modification or waiver of one or more requirements of these rules and regulations if, in the opinion of the DIRECTOR, a health hazard or nuisance will not result from the modification or waiver.

§4605. Scope.

These rules and regulations shall apply to all PUBLIC SWIMMING POOLS as defined herein, except private SWIMMING POOL maintained by an individual for the use of his family and friends.

These rules and regulations shall apply to all auxiliary structures and equipment thereof such as POOL DECKS, diving boards, locker rooms, SHOWER and dressing rooms, toilet facilities, and filtration, pumping, piping, disinfecting, and SAFETY equipment provided and maintained in connection with such facility.

§4606. Sanitary Permit.

(a) No PERSON shall directly or indirectly in any manner, conduct, control, manage, maintain, or operate a PUBLIC SWIMMING POOL unless a valid Sanitary Permit issued by the DEPARTMENT to operate such a facility has been obtained and posted. Any PERSON, before

constructing a new PUBLIC SWIMMING POOL, or making SUBSTANTIAL ALTERATION of an existing facility shall first submit plans and specifications of such facility or changes to the DIRECTOR for approval.

(b) An application for a Sanitary Permit to operate all new or existing PUBLIC SWIMMING POOL shall be made in writing on a form prescribed by the DEPARTMENT, signed by the applicant or his authorized agent, and shall contain such information that will determine that the facility and its operation are in compliance with the applicable provisions of these rules and regulations.

(c) Before the application for a Sanitary Permit shall be approved, the DEPARTMENT shall verify that the facility meets the minimum sanitary requirements and STANDARDS by means of a pre-operational inspection. This shall include the access onto premises for assessment, inspection, and/or investigation.

(d) Before a pre-operational inspection is conducted, plans and specifications shall be submitted to the DIRECTOR in accordance with the requirements established in these rules and regulations, which shall include the following:

(1) Site information indicating, at a minimum, the location of all utilities, wells, topography, natural water features, and potential sources of surface drainage and pollution which may affect the proposed PUBLIC SWIMMING POOL;

(2) A plot plan including a general map and detailed scaled drawings of the PUBLIC SWIMMING POOL site plan or floor plan with detailed locations of each PUBLIC SWIMMING POOL and related features, and locations of all water supply facilities, sources of drinking water, public or private sewers and relative elevations of paved or

other walkways and the EQUIPMENT ROOM floor with the elevations of storm and sanitary sewer inverts and street grade;

(3) Detailed scaled and dimensional drawings for each individual PUBLIC SWIMMING POOL showing the following:

(i) Location and type of INLETS, overflows, drains, suction outlets, overflow gutters or devices, piping, POOL water elevation, lighting, POOL markings, surface materials, and POOL features such as ladders, stairs, diving boards, SLIDES, and play features;

(ii) Location and type of DECK, curb, or walls enclosing the POOL, DECK drains, walkways, flooring, area finishes, entries and exits, hose bibs, fences, telephones, and area lighting;

(iii) A flow diagram showing the location, plan, elevation, and schematics of filters, pumps, chemical feeders and interlocks, chemical controllers and interlocks, supplementary DISINFECTION system, heaters, surge tanks, BACKFLOW prevention assemblies, valves, piping, flow meters, gauges, thermometers, test cocks, sight glasses, and drainage system;

(iv) A schematic layout of the EQUIPMENT ROOM showing accessibility for installation and maintenance, and CHEMICAL STORAGE SPACES;

(v) Location and number of HYGIENE FACILITIES provided including dressing rooms, lockers, SHOWERS, handwashing facilities, toilet fixtures, and DIAPER-CHANGING STATIONS; and

(vi) Layout for zones of PATRON surveillance as specified in §4637 (e) showing features or design configurations that can impact PATRON surveillance.

§4607. Public Swimming Pool Design Standards and Construction.

(a) PUBLIC SWIMMING POOLS shall be constructed of reinforced concrete or impervious and structurally sound materials which provide a smooth, easily cleaned, watertight structure capable of withstanding the anticipated stresses for full and empty conditions.

(b) All materials shall be inert, non-toxic, resistant to corrosion, impervious, enduring, and resistant to damages related to the environmental conditions of Guam.

(c) All corners formed by intersection of walls and floors shall be rounded.

(d) Wood, sand, or earth are not permitted as an interior finish in PUBLIC SWIMMING POOL construction.

(e) A PUBLIC SWIMMING POOL and all associated structures thereto shall be so shaped and arranged that maintenance of safe and sanitary conditions, and recirculation of the water, are not impaired. An obstruction shall not extend into or above the PUBLIC SWIMMING POOL so as to create a SAFETY hazard.

(f) The finished surface of the PUBLIC SWIMMING POOL wall and floor shall be smooth, without cracks or open joints, non-slip, easily cleaned and light colored, except that a marking may be inserted against a light background.

(g) PUBLIC SWIMMING POOL floors in areas less than three feet deep, underwater benches, and all other floors and surfaces required to be slip-resistant shall have a minimum dynamic coefficient of friction at least equal to the requirements of ANSI A137.1-2012 of 0.42 as measured by the DCOF AcuTest.

(h) A hydrostatic relief valve and/or suitable under drain system shall be provided where the water table exerts hydrostatic pressure to uplift the PUBLIC SWIMMING POOL when empty or drained.

(i) All vertical walls shall have a durable finish suitable for regular scrubbing and cleaning at the waterline. SKIMMER POOLS shall have a six-inch to 12-inch high waterline finish, and gutter or PERIMETER OVERFLOW SYSTEM shall have a minimum finish height of two inches.

(j) If dark colors are used for the POOL finish, these colors shall not extend more than 12 inches below the waterline.

(k) Except for special use POOLS, the slope of the floor for all POOLS with water depths under five feet shall not exceed one-foot vertical drop for every 12-feet horizontal, and shall not exceed one-foot vertical to three-feet horizontal for POOLS with water depths five foot and greater.

(l) Except as provided in (m) of this Section, floors and walls below the water line shall be white or light pastel in color such that from the POOL DECK a BATHER is visible on the POOL floor and the following items can be identified:

(1) Algae growth, debris or dirt within the POOL, and

(2) Cracks in the surface finish of the POOL, and

(3) Marker tiles defined in §4620.

(m) An exception for the color and finish requirement in (l) of this Section shall be made for the following PUBLIC SWIMMING POOL components:

(1) Competitive lane markings;

(2) Dedicated competitive diving well floors;

(3) Step or bench edge markings;

(4) POOLS shallower than 24 inches;

(5) Water line tiles;

(6) WAVE POOL and SURF POOL depth change indicator tiles; or

(7) Other designs approved by VARIANCE.

(n) PUBLIC SWIMMING POOLS shall be free of recessed areas which will interfere with circulation of the water and with skimming action and SAFETY supervision of BATHERS.

(o) PERIMETER OVERFLOW GUTTERS and/or SKIMMERS meeting the requirements of §4613 and §4614 shall be required on all PUBLIC SWIMMING POOLS.

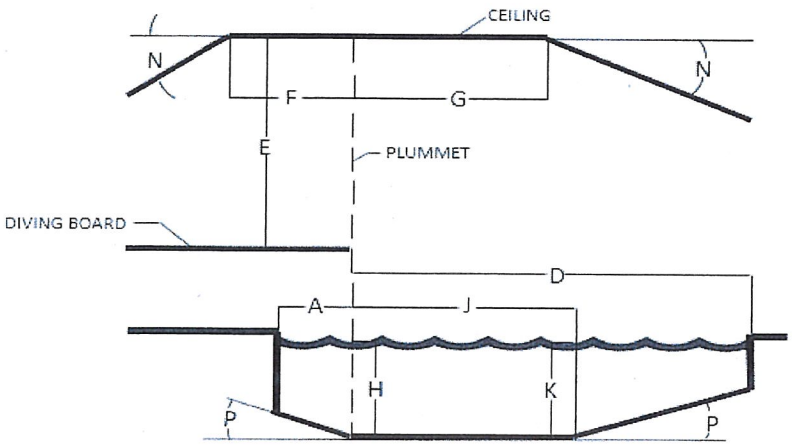
(p) Diving boards shall be permitted only when the diving envelope conforms to the STANDARDS of the certifying agency that regulates competitive diving at the PUBLIC SWIMMING POOL. If the PUBLIC SWIMMING POOL does not have competitive diving or certifying agency that regulates competitive diving, then the diving envelope shall conform to the diving envelope STANDARDS of Table 1, Table 2, Figure 1, and Figure 2. Starting platforms shall only be used for competitive swimming and training, and under the direct supervision of a coach or instructor. Starting platforms shall be removed, if possible, or prohibited from use during all recreational or non-competitive swimming activity by covering platforms with a manufacturer-supplied platform cover or with another means or device that is readily visible and clearly prohibits use.

Table 1. Diving Board Dimensions

Board Height	1.64 ft.	2.46 ft.	3.28 ft.	3.84 ft.
Board Length	10.0 ft.	12.0 ft.	16.0 ft.	16.0 ft.
Board Width	20.0 in.	20.0 in.	20.0 in.	20.0 in.

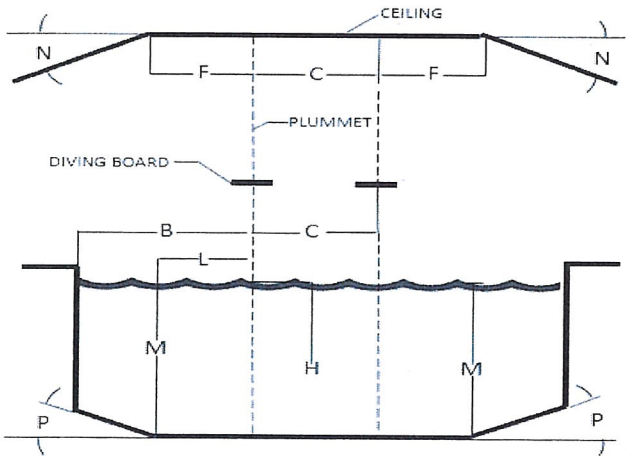
Table 2. Dimensions of Components Related to Diving Wells					
Letters below refer to Figures 1 & 2		Minimum Dimensions			
A	**Distance from plummet back to pool wall**	3.0 ft.	4.5 ft.	6.0 ft.	6.0 ft.
B	**Distance from plummet to pool wall at side**	10.0 ft.	10.0 ft.	10.0 ft.	11.5 ft.
C	**Distance from plummet to adjacent plummet**	8.83 ft.	8.83 ft.	8.83 ft.	8.54 ft.
D	**Distance from plummet to pool wall ahead**	26.0 ft.	27.83 ft.	29.58 ft.	33.67 ft.
E	**Height, board to ceiling at plummet & distances F and G**	16.0 ft.	16.0 ft.	16.0 ft.	16.0 ft.
F	**Clear overhead distance behind and each side of plummet**	8.0 ft.	8.0 ft.	8.0 ft.	8.0 ft.
G	**Clear overhead distance ahead of plummet**	16.0 ft.	16.0 ft.	16.0 ft.	16.0 ft.
H	**Depth of water at plummet**	9.5 ft.	10.75 ft.	12.0 ft.	12.5 ft.
J	**Distance ahead of plummet to depth K**	12.0 ft.	14.25 ft.	16.5 ft.	19.75 ft.
K	**Depth at distance J ahead of plummet**	8.75 ft.	10.0 ft.	11.28 ft.	12.17 ft.
L	**Distance at each side of plummet to depth M**	8.0 ft.	8.13 ft.	8.25 ft.	9.92 ft.
M	**Depth at distance L on each side of plummet**	9.08 ft.	10.33 ft.	11.63 ft.	12.17 ft.
N	**Maximum slope to reduce height E**	30°	30°	30°	30°
P	**Maximum floor slope to reduce depth ahead of K, to the sides of M, or back to pool wall behind H**	3:1	3:1	3:1	3:1

Figure 1. Diving Platform Longitudinal Section



LONGITUDINAL SECTION
NO SCALE

Figure 2. Diving Platform Cross Section



CROSS SECTION
NO SCALE

(q) Where applicable, all equipment used, or proposed to be used, in PUBLIC SWIMMING POOLS shall be listed and labeled by an ANSI accredited certification organization, or have EPA registration, as applicable.

(r) At least one space dedicated to CHEMICAL STORAGE SPACE shall be provided to allow safe STORAGE of the chemicals present. An emergency eye wash station shall be provided in all CHEMICAL STORAGE SPACES. The CHEMICAL STORAGE SPACE shall be separate from the EQUIPMENT ROOM.

(s) It shall be the responsibility of the Sanitary Permit holder of the PUBLIC SWIMMING POOL to comply with all applicable codes (i.e., STANDARDS of Guam Fire Department and Guam Environmental Protection Agency) when storing chemicals necessary for maintenance purposes, operation, or sanitation of equipment in the EQUIPMENT ROOM.

(t) A carbon monoxide detector with local alarming, listed and labeled in accordance with UL 2075, shall be installed in all EQUIPMENT ROOMS and rooms adjacent to spaces containing fuel-burning equipment or vents carrying the products of combustion.

(u) Floors of an interior CHEMICAL STORAGE SPACE and EQUIPMENT ROOM shall be of concrete or other suitable material having a smooth, slip resistant finish that is easily cleanable. Openings or gaps on floors, walls, or ceilings shall be permanently sealed against air leakage.

(v) All doors opening into CHEMICAL STORAGE SPACES shall be equipped with permanent signage warning against unauthorized entry, and specifying the expected hazards and the location of the associated Safety Data Sheets. Doors shall be constructed of corrosion-resistant materials and automatic lock to prevent unauthorized entry.

§4608. Water Supply.

(a) The water supply serving the PUBLIC SWIMMING POOL and all PLUMBING FIXTURES including drinking fountains, handwashing sinks, and SHOWERS shall come from an approved public water system.

(b) The water supply shall have sufficient capacity to simultaneously serve all PLUMBING FIXTURES.

(c) If a spill spout is used at a PUBLIC SWIMMING POOL, the fill spout shall be located so that it is not a SAFETY hazard to BATHERS. The open end of the fill spouts shall not have sharp edges or protrude more than two inches beyond the edge of the POOL. The open end shall be separated from the water by an air gap of at least 1 ½ pipe diameters measured from the pipe outlet to the POOL.

(d) The potable water supply serving a PUBLIC SWIMMING POOL shall be protected against BACKFLOW consisting of either of the following:

(1) An acceptable air gap consisting of a vertical distance of not less than two pipe diameters of the water supply pipe or six inches, whichever is greater, over the lowest free-flowing discharge point of the receiving pipe, tank, or vessel. Splash guards that are open to the atmosphere may be used around the air gap; or

(2) Where permitted, an approved reduced pressure zone BACKFLOW preventer installed according to the plumbing code and the DEPARTMENT.

§4609. Wastewater Disposal.

(a) The sewer system shall be adequate to serve all PLUMBING FIXTURES in the facility including the SHOWERS, toilets, and related structures.

(b) There shall be no physical connection between the sewer system and any drain from the PUBLIC SWIMMING POOL or RECIRCULATION SYSTEM. Any PUBLIC SWIMMING POOL or gutter drain when discharged to the sewer system, storm drain, or other approved natural drainage course shall connect through a suitable air gap so as to preclude possibility of backup of sewage or waste into the PUBLIC SWIMMING POOL piping system.

(c) The sanitary sewer serving the PUBLIC SWIMMING POOL and auxiliary facilities shall discharge to the public sewer system wherever possible. Where no such sewer is available, the connection shall be made to a suitable disposal plant designed, constructed, and operated properly.

§4610. Depth Markings and Lines.

(a) Depth of water shall be plainly marked at or above the water surface on the vertical wall next to the PUBLIC SWIMMING POOL, at maximum and minimum depths, at the points of break between the deep and shallow portions, on both sides and at each end of the POOL, and spaced at not more than twenty-five feet intervals measured peripherally. In addition, for water less than five feet in depth, the depth shall be marked at one-foot depth intervals. The depth in the diving areas shall be appropriately marked.

(b) Depth markers shall be positioned to be read from within the POOL and while standing on the DECK facing the POOL. Depth markers shall be in numerals of four inches minimum height and a color contrasting with background.

(c) Depth markers shall be marked in units of feet and inches. Abbreviations of "FT" and "IN" may be used in lieu of "FEET" and "INCHES." Symbols for feet *(')* and inches *(")* shall not be permitted on water depth signs. Metric units may be provided in addition to – but not in lieu of – units of feet and inches.

(d) Lane lines or other markings on the bottom of a POOL shall not exceed ten inches in width. Decorative designs on the bottom or walls which give the illusion of being or mistaken for the human form are prohibited.

(e) For POOL water depths five feet or shallower, all DECK depth markers required in these rules and regulations shall be provided with "NO DIVING" warning signs along with the universal international symbol for "NO DIVING."

(f) For POOLS deeper than five feet, a line of contrasting color, not less than two inches and not more than six inches in width, shall be clearly and permanently installed on the POOL floor at the shallow side of the break in the floor slope, and extend up the POOL walls to the waterline.

(g) One foot to the shallow water side of the break in floor slope and contrasting band, a SAFETY float rope shall extend across the POOL surface with the exception of WAVE POOLS, SURF POOLS, and WATERSLIDE LANDING POOLS.

§4611. Recirculation System.

(a) A RECIRCULATION SYSTEM consisting of one or more pumps, pipes, return INLETS, suction outlets, tanks, filters, water conditioning and DISINFECTION equipment, and other accessory equipment shall be provided to ensure effective distribution of treated water and maintain a uniform disinfectant residual and pH throughout the PUBLIC SWIMMING POOL.

(b) All PUBLIC SWIMMING POOLS shall comply with the maximum allowable TURNOVER times on Table 3 and Table 4.

Table 3. Turnover Times

Type of Public Swimming Pool	Turnover Maximum
Diving Pools	2 hours
Lazy River	2 hours
Plunge Pools	1 hour
Runout Slide	1 hour
Wading Pools	1 hour

Wave Pools	2 hours
All Other Pools	6 hours

Table 4. Turnover Times for Spa and Therapy Pools		
Temperature	**Load**	**Turnover Maximum**
≤ 72°-93°F	> 2500 gals/person	4 hours or less
≤ 72°-93°F	> 450 gals/person	2 hours or less
≤ 72°-93°F	≤ 450 gals/person	1 hour or less
≥ 93-104 F	All	0.5 hours or less

(c) The TURNOVER time shall be calculated based on the total volume of water divided by the flow rate through the filtration process.

(d) For gutter or SKIMMER POOLS with main drains, the required recirculation flow shall be as follows during normal operation:

(1) At least 80% of the flow through the POS, and

(2) No greater than 20% through the main drain.

(e) RECIRCULATION SYSTEM piping shall be designed so that water velocities do not exceed eight feet per second on the discharge side of the recirculation pump and suction piping shall be sized so that the water velocity does not exceed six feet per second unless alternative values have proper engineering justification.

(f) Piping shall be of non-toxic material, resistant to corrosion, and able to withstand operating pressures, chemicals, and temperatures. Piping and piping system component materials shall be listed and labeled to NSF/ANSI Standard 14, NSF/ANSI Standard 50, and NSF/ANSI Standard 61, as applicable. All piping shall be clearly marked to indicate type or source of water and direction of flow with clear labeling and/or color coding.

(g) All valves shall be clearly identified with a brass tag, plastic laminate tags, or permanently affixed alternate.

(h) All recirculation pumps shall meet the minimum Net Positive Suction Head requirement for the system. Pumps shall be of adequate capacity to provide the required number of TURNOVERS of PUBLIC SWIMMING POOL water as specified in (b) of this Section and whenever possible shall be so located as to eliminate the need for priming. If the pump or suction is located above the overflow level of the POOL, the pump shall be self-priming. The pump or pumps shall be capable of providing flow adequate for the back-washing of filters. Where vacuum filters are used, a vacuum limit switch shall be provided on the pump suction line. The vacuum limit switch shall be set for a maximum vacuum of 18 inches of mercury.

(i) The RECIRCULATION SYSTEM shall include a strainer or screen device on the suction side to prevent hair, lint, and foreign objects from reaching the pump and filters. Strainers shall be corrosion-resistant with openings not more than 1/8 inch in size, providing a free-flow area at least four times the area of the pump suction line, and shall be readily accessible and cleaned as necessary to maintain proper skimming. An extra strainer basket shall be provided with each strainer device to permit continuity of service.

(j) A cleaning system shall be provided to remove dirt from the bottom of the POOL. The cleaning system shall not create an entanglement or suction entrapment hazard or interfere with the operation or use of the PUBLIC SWIMMING POOL. Use of integral vacuum systems, meaning a vacuum system that uses the main circulating pump or a dedicated vacuum pump connect to the POOL with PVC piping and terminating at the POOL with a flush-mounted vacuum port fitting, shall be prohibited.

(k) A flow meter accurate within +/- 5% of the actual design flow shall be provided for each filtration system. Flow meters shall be listed and labeled to NSF/ANSI Standard 50 by an ANSI-accredited certification organization. When used with sand filters, the flow meter shall be

located at a point so that the rate of the backwash will also be indicated. The flow meter shall be capable of measuring flows at least twenty percent over the design flow rate and shall be easy to read. Mercury manometers must be equipped with return wells to keep mercury from being blown out of the manometer.

(l) All components of the filtration and RECIRCULATION SYSTEMS shall be kept in continuous operation 24 hours per day. The system flow rate shall not be reduced more than 25% lower than the minimum design requirements and only reduced when the POOL is unoccupied.

§4612. Inlets and Outlets.

(a) Effective distribution of treated water shall be accomplished by either a continuous POS with integral INLETS or by means of directionally adjustable INLETS to facilitate circulation of the water and maintain a disinfectant residual as required by §4619 uniformly throughout the entire PUBLIC SWIMMING POOL.

(b) INLETS shall be hydraulically sized to provide the design flow rates for each POOL area of multi-zone POOLS based on the required design TURNOVER RATE for each zone.

(c) POOLS shall use wall and/or floor INLETS to provide adequate mixing. Wall INLETS shall be flushed against the POOL wall; submerged at least 24 inches below the water level; spaced no greater than 20 feet apart; placed within five feet of each corner of the POOL; placed at least five feet from a SKIMMER; and placed in each recessed or isolated area of the POOL. INLETS shall not protrude more than one and ¼ inches beyond the wall surface into the POOL and shall be rounded and smooth so as not to produce a SAFETY hazard.

(d) For POOLS greater than 50 feet wide, floor INLETS shall be required. Floor INLETS shall be flush with the bottom of the POOL; spaced no greater than 20 feet apart; row of INLETS

located within 15 feet of each side wall; and spaced no greater than 25 feet from the nearest side walls when combined with wall INLETS.

(e) A minimum of two hydraulically balanced filtration system outlets are required in the bottom of all PUBLIC SWIMMING POOLS. The outlets shall be connected to a single main suction pipe by branch lines piped to provide hydraulic pressure balance between the drains. The branch lines shall not be valved so as to be capable of operating independently. Outlets shall be equally spaced from the POOL side walls and shall be located no less than three feet apart, measuring between the centerlines of the suction outlet covers. Suction outlets, including sumps and covers, shall be listed and labeled to the requirements of ANSI/APSP-16 2011. The bottom drain and recirculation outlets shall be covered with grates or other protective devices which cannot be removed except with tools. The slots or openings of these covers shall not exceed ½ inch in the smaller dimension.

§4613. Perimeter Overflow Gutters.

(a) PERIMETER OVERFLOW GUTTERS shall extend completely around the PUBLIC SWIMMING POOL, except at steps or recessed ladders. The overflow gutter may also serve as a step or a handhold, provided that the gutter is provided with a grating or cover and conforms to all construction and dimensional requirements herein specified.

(b) PERIMETER OVERFLOW GUTTERS shall be capable of continuously removing at least 125 percent of the approved total recirculation flow rate chosen by the designer.

(c) Gutter water shall be returned to the filter, or to waste, at the discretion of the POOL OPERATOR.

(d) All overflow gutters shall be connected to the RECIRCULATION SYSTEM through a properly designed surge tank. A vacuum gravity filter box may be used as a surge tank. The

gutter system shall have an effective net surge capacity of at least one gallon per each square foot of POOL surface area. The surge tank's minimum, maximum, and normal POOL operating water levels shall be marked on the tank so as to be readily visible for inspection. Surge tanks shall have overflow pipes to convey excess water to waste via an air gap or other approved BACKFLOW prevention device.

(e) Gutters shall be level with a tolerance of +/- 1/16 of an inch around the perimeter of the PUBLIC SWIMMING POOL. The opening into the gutter beneath the coping shall not be less than four inches wide with a depth of at least three inches. Where large gutters are used, they shall be designed to prevent entrance or entrapment of BATHERS' arms and legs. The overflow edge or lip shall be rounded and not thicker than two and ½ inches. The overflow outlets shall be provided with outlet pipes which shall in any case be at least two inches in diameter.

(f) The outlet fittings shall have a clear opening in the grating of at least equal to one and ½ times the cross-sectional area of the outlet pipe. The outlet shall be spaced not more than three feet on centers in flat gutters. If the bottom of the gutter slopes is at least 1/3 of an inch per foot from a crown toward the outlet fittings, the outlets may be placed not over fifteen feet on the center. The use of continuous-flow gutters with single or multiple outlets will be acceptable provided they are properly designed for the POOL, self-cleansing, and capable of maintaining an effective skimming action without discharging back into the POOL.

(g) Nothing in this Section shall preclude the use of roll-out gutters or DECK-level type PUBLIC SWIMMING POOLS. Such designs shall conform to the general provisions relating to overflow rates. A curb, if used, shall be twelve inches wide and from three inches to six inches above the DECK. The gutter must be wide enough to provide safe footing.

(h) Gutters shall permit ready inspection, cleaning, and repair.

§4614. Skimmers.

(a) SKIMMERS are permitted on PUBLIC SWIMMING POOLS which are not more than thirty feet wide and not more than 1,600 square feet, provided an approved handhold is installed completely around the POOL. SKIMMERS shall be installed in each corner, or in the coves of a free-form POOL, and at twenty to forty-foot intervals around the POOL perimeter. Handholds shall consist of bull-nosed coping not over two and ½ inches thick for the outer two inches or an equivalent approved handhold. The handholds must be no more than nine inches above the normal water line.

(b) The SKIMMER system shall be designed to handle up to 100% of the total recirculation flow rate chosen by the designer. SKIMMERS shall be so located as to provide effective skimming of the entire water surface and so as not to be affected by restricted flow in areas such as near steps and within small recesses.

(c) There shall be at least one such SKIMMER for each five hundred square feet of POOL surface area or fractional part thereof. Additional SKIMMERS may be required to achieve effective skimming under site-specific conditions and/or to comply with all applicable building codes.

(d) Hybrid systems that incorporate surge weirs in the overflow gutters to provide for in-POOL surge shall meet all of the requirements specified for overflow gutters (with the exception of the surge or balance tank, since the surge capacity requirement will be alternately met by the in-POOL surge capacity). The number of surge weirs shall be based on the individual surge weir capacity and the operational apportionment of the design recirculation flow rate.

(e) The flow rate for the SKIMMERS shall comply with manufacturer data plates or NSF/ANSI 50, including Annex K.

(f) Each SKIMMER shall have a weir that adjusts automatically to variations in water level over a range of at least four inches.

(g) Each SKIMMER shall be equipped with a trimmer valve capable of distributing the total flow between individual SKIMMERS.

(h) The base of each SKIMMER shall be level with all other SKIMMERS in the POOL within a tolerance of +/- ¼ of an inch.

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

(j) The SKIMMER shall be constructed of sturdy, corrosion-resistant materials.

(k) There shall be some means of shutting off each SKIMMER.

§4615. Filter Requirements.

(a) General

(1) Filtration shall be required for all PUBLIC SWIMMING POOLS that recirculate water.

(2) The filter shall be designed, constructed, and operated so that structural or functional failures will not permit passage of unfiltered water.

(3) All filters shall be listed and labeled to NSF/ANSI 50 by an ANSI-accredited certification organization.

(4) All filters shall be so designed and installed with adequate clearance and facilities for ready and safe inspection, maintenance, disassembly, and repair.

(5) Filters should be used with the appropriate filter media as recommended by the filter manufacturer for maximum clarity and cycle length for PUBLIC SWIMMING POOL use. A means and access for easy removal of filter media shall be required.

(b) Granular Media Filters

(1) The granular media filter system shall have valves and piping to allow isolation, venting, complete drainage (for maintenance or inspections), and backwashing of individual filters.

(2) Filtration accessories shall include with the influent and effluent pressure gauges, backwash sight glass or other means to view backwash water clarity, and manual air relief system.

(3) High-rate granular media filters shall be designed to operate at no more than 15 gallons per minute per square foot when a minimum bed depth of 15 inches is provided per manufacturer. When a bed depth is less than 15 inches, filters shall be designed to operate at no more than 12 gallons per minute per square foot.

(4) The granular media filter system shall be designed to backwash each filter at a rate of at least 15 gallons per minute per square foot of filter bed surface area, unless explicitly prohibited by the filter manufacturer and approved at an alternate rate as specified in their NSF/ANSI 50 listing.

(5) The minimum depth of filter media cannot be less than the depth specified by the manufacturer.

(6) Influent and effluent pressure gauges shall have the capability to measure up to a 20 pounds per square inch increase in the differential pressure across the filter bed in increments of one pound per square inch or less.

(7) If coagulant feed systems are used, they shall be installed with the injection point located before the filters as far ahead as possible, with electrical interlocks in accordance with §4618 (b).

(c) Precoat Filters

(1) The design filtration rate for vacuum precoat filters shall not be greater than either two gallons per minute per square foot or two and ½ gallons per minute per square foot when used with a continuous precoat media feed (commonly referred to as "body-feed").

(2) The design filtration rate for pressure precoat filters shall not be greater than two gallons per minute per square foot of effective filter surface area.

(3) The filtration surface area shall be based on the outside surface area of the media with the manufacturer's recommended thickness of precoat media and consistent with their NSF/ANSI 50 listing and labeling.

(4) The pre-coat process shall follow the manufacturer's recommendations and requirements of NSF/ANSI Standard 50.

(d) Cartridge Filters

(1) The design filtration rate for surface-type cartridge filter shall not exceed 0.30 gallons per minute per square foot.

(2) Filter cartridges shall be supplied and sized in accordance with the filter manufacturer's recommendation for PUBLIC SWIMMING POOL use.

(3) One complete set of spare cartridges shall be maintained on site in a clean and dry condition.

§4616. Pool Access and Egress.

(a) Each POOL shall have a minimum of two means of access and egress with the exception of WATERSLIDE LANDING POOLS, WATERSLIDE RUNOUTS, and WAVE POOLS.

Acceptable means of access/egress shall include stairs/handrails, grab rails/RECESSED STEPS, ladders, ramps, swim outs, and zero-depth entries.

(b) If the POOL is over thirty feet wide, such means of access/egress shall be installed on each side of the POOL and shall be placed not more than 75 feet apart.

(c) Where provided, stairs shall be constructed with slip-resistant materials. The leading horizontal and vertical edges of stair treads shall be outlined with slip-resistant contrasting tile or other permanent marking of not less than one inch and not greater than two inches.

(d) Where stairs are provided in POOL ~~the~~ water depths greater than five feet, they shall be recessed into the side of the POOL, not protrude into the swimming area, and the lowest tread shall be not less than four feet below normal water elevation.

(e) Traditional rectangular stairs shall have a minimum uniform horizontal tread depth of 12 inches, and a minimum unobstructed tread width of 24 inches.

(f) Dimensions of stair treads for other types of stairs shall conform to the STANDARDS of Table 5, Figure 3, Figure 4, and Figure 5.

Table 5. Required Dimensions for Stairs, Treads, and Risers

Dimensions	T-1 Standard	T-1 Convex, Concave, Triangular	T-2	W-1	H-1
Minimum	12 inches	21 inches	12 inches	24 inches	6 inches
Maximum	18 inches	24 inches	16 inches	N/A	12 inches

Figure 3. Stairs, Treads, and Risers

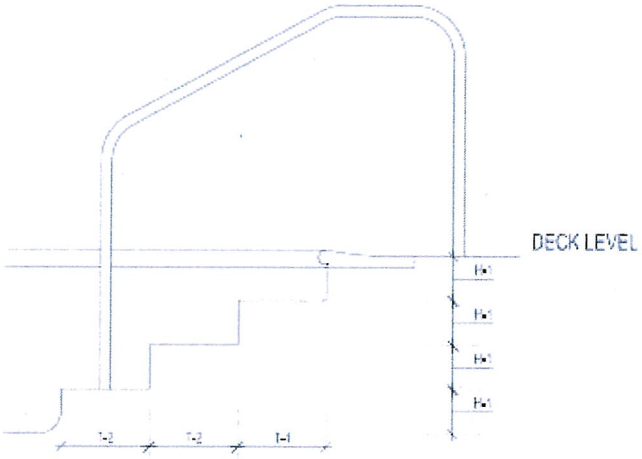


Figure 4. Stair Treads

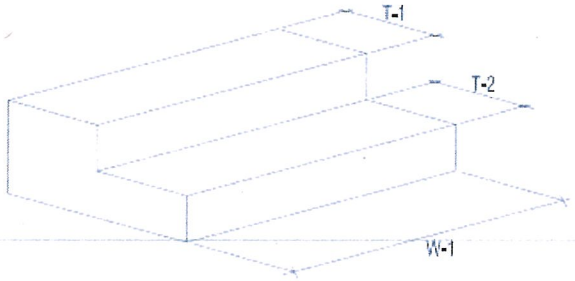


Figure 5. Unique Stair Treads



(g) The top surface of the uppermost stair tread shall be located not more than 12 inches below the POOL coping or DECK.

(h) Stair risers shall have a minimum uniform height of six inches and a maximum height of 12 inches, with a tolerance of ½ of an inch between adjacent risers.

(i) Stairs shall not be used underwater to transition between two sections of POOL of different depths.

(j) PUBLIC SWIMMING POOL ladders shall be corrosion-resistant and shall be anchored securely to the DECK. Ladders shall have two handrails with not less than 17 inches and not more than 24 inches horizontal clear space between them. Ladders and handrails shall be designed to resist a load of 50 pounds per linear foot applied in any direction and independently a single concentrated load of 200 pounds applied in any direction at any location. The upper railing surface of handrails shall extend above the POOL coping or DECK a minimum of 28 inches. The clear space between handrails and the POOL wall shall be not less than three inches and not more than six inches.

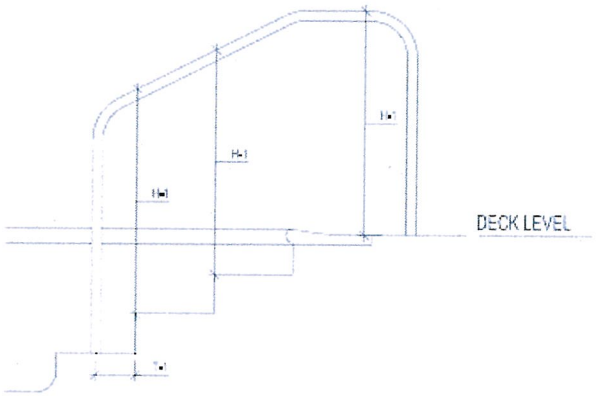
(k) Ladder treads shall be slip-resistant and shall have a minimum horizontal tread depth of 1 and ½ inches. The distance between the horizontal tread and POOL wall shall not be greater than four inches. Ladder treads shall be uniformly spaced not less than seven inches and not more than 12 inches vertically at the handrails. The top surface of the upmost ladder tread shall be located not more than 12 inches below the POOL coping, gutter, or DECK.

(l) Stairs wider than five feet shall have at least one additional handrail for every 12 feet of stair width.

(m) Dimensions of handrails shall conform to the STANDARDS of Table 6 and Figure 6.

Table 6. Stair Handrail Dimensions		
Dimensions	T-1	H-1
Minimum	3 inches	34 inches
Maximum	N/A	38 inches

Figure 6. Stair Handrails



(n) RECESSED STEPS shall be slip-resistant, easily cleanable, shall drain into the POOL, and dimensions shall conform to the STANDARDS of Table 7, Figure 7, and Figure 8.

Table 7. Recessed Steps Dimensions				
Dimensions	H-1	H-2	W-1	D-1
Minimum	6 inches	5 inches	12 inches	5 inches
Maximum	12 inches	N/A	N/A	N/A

Figure 7. Recessed Steps Dimensions

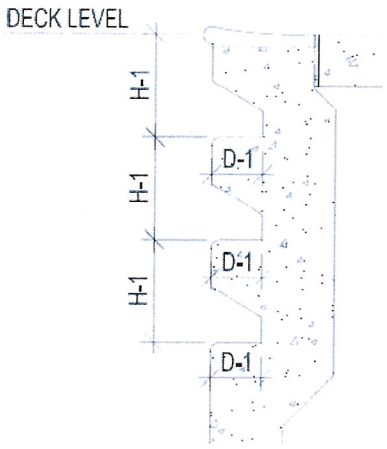
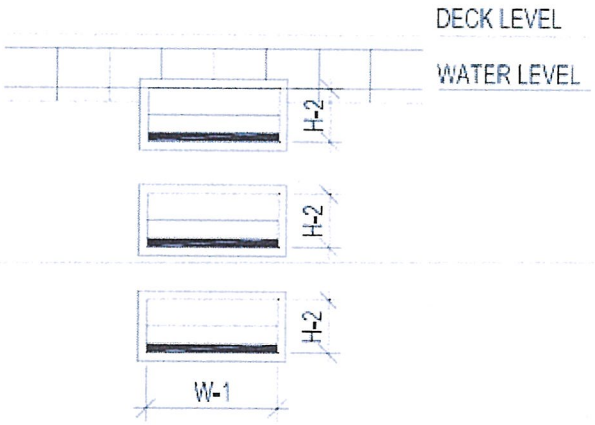


Figure 8. Recessed Steps Dimensions



§4617. Decks and Walkways.

(a) A continuous DECK with at least four feet of clearance from the POOL edge to fencing or other obstruction shall be provided to allow for QUALIFIED LIFEGUARD transit, roaming, or change of positioning to maximize viewing of the zone of BATHER surveillance as well as execution of water extrication. All DECK edges shall be beveled, rounded, or otherwise relieved to eliminate sharp corners. The DECK area shall be impervious and easily cleanable.

(b) The surface of the paved walk or DECK shall not drain into the PUBLIC SWIMMING POOL, RECIRCULATION SYSTEMS, or the overflow gutter. Drainage shall be conducted away from the POOL area in a manner that will not create muddy, hazardous, or objectionable conditions. DECKS shall be sloped away from the POOL and in accordance with Table 8.

Table 8. Minimum Slopes for Drainage	
Surface	Minimum Slope
Smooth finishes; such as tile, hand-finished concrete & lightly-broomed concrete	1/8 inch per foot
Moderately textured finishes; such as exposed aggregate or medium-broomed concrete	1/4 inch per foot
Heavily textured finishes; such as brick (where permitted)	3/8 inch per foot

§4618. Chemical Control.

(a) DISINFECTION and pH control chemicals shall be automatically introduced through the RECIRCULATION SYSTEM. A chemical controller, as specified in this Section shall be provided and used for monitoring and control of disinfectant and pH feed equipment. DISINFECTION and pH control chemicals shall be added using a feeder that meets the requirements outlined in this Section.

(b) The POOL shall be equipped with chemical feed equipment such as flow-through chemical feeders, electrolytic chemical generators, mechanical chemical feeders, chemical feed pumps, and automated controllers that are listed and labeled to NSF ANSI 50 by an ANSI-accredited certification organization. Flow-through chemical feeders shall only be used with the chemical (formulation, brand, size, and shape) specified by the chemical feeder manufacturer. All

chemical feeders shall be provided with an automatic means to be disabled through an electrical interlock with at least two of the following:

(1) Recirculation pump power,

(2) Flow meter/flow switch in the return line,

(3) Chemical control power and paddle wheel or flow cell on the chemical controller if SAFETY test confirms feed systems are disabled through the controller when the pump is turned off, loses prime, or filters are backwashed.

(c) Feeders shall be capable of supplying disinfectant and pH control chemicals to the PUBLIC SWIMMING POOL to maintain the minimum required DISINFECTION levels at all times in accordance with these rules and regulations. All CHLORINE dosing and generating equipment, including erosion feeders, or in line electrolytic and brine/batch generators, shall be designed with a capacity to provide 4.0 lbs of FREE AVAILABLE CHLORINE (FAC)/day/10,000 gal of POOL water for outdoor PUBLIC SWIMMING POOLS, or 2.5 lbs FAC/day/10,000 gal of POOL water for INDOOR SWIMMING POOLS at a minimum.

(d) The injection point of DISINFECTION chemicals shall be located below any pH control chemical injection point with sufficient physical separation of the injection points to reduce the likelihood of mixing of these chemicals in the piping during periods of interruption of RECIRCULATION SYSTEM FLOW. Means of injection shall not allow BACKFLOW into the chemical system from the POOL system. Coagulants shall be metered and injected through a pump system prior to the filters per the manufacturer's recommended rate.

(e) Automated controllers shall be installed for monitoring and turning on or off chemical feeders used for pH and disinfectants at all PUBLIC SWIMMING POOLS. Operation manuals or other instructions that give clear directions for cleaning and calibrating automated

controller probes and sensors shall be provided in close proximity to the automated controller. A set point shall be used to target the disinfectant level and the pH level.

(f) Equipment and piping used to apply chemicals to the water shall be of such size, design, and material that they may be cleaned and will be free from clogging. All material used for such equipment and piping shall be resistant to action of chemicals to be used therein.

§4619. Disinfection and Water Quality.

(a) PUBLIC SWIMMING POOLS when in use shall be continuously disinfected by a chemical which imparts a residual effect. Only products that are EPA-registered for use as sanitizers or disinfectants in PUBLIC SWIMMING POOLS shall be permitted.

(b) When CHLORINE is used, PUBLIC SWIMMING POOLS not using cyanuric acid (CYA), shall maintain a minimum FAC concentration of 1.0 ppm, and POOLS using CYA shall maintain a minimum FAC concentration of 2.0 ppm. SPAS shall maintain a minimum FAC concentration of 3.0 ppm. Maximum FAC concentrations shall not exceed 10.0 ppm at any time the PUBLIC SWIMMING POOL is open to BATHERS.

(c) If used, CYA levels shall not exceed 90 ppm. Use of CYA or stabilized CHLORINE products shall be prohibited for new construction, SUBSTANTIAL ALTERATION, or DISINFECTION equipment replacements in SPAS and THERAPY POOLS after the effective date of these rules and regulations.

(d) Bromine-based disinfectants may be applied to PUBLIC SWIMMING POOLS through the addition of an organic bromine compound (1,3-Dibromo-5,5-dimethylhydantoin (DBDMH) or 1-bromo-3-chloro-5,5-dimethylhydantoin (BCDMH)). Minimum bromine concentrations of 4.0 ppm shall be maintained at all times in SPAS, and 3.0 ppm shall be maintained at all times in all

other PUBLIC SWIMMING POOLS. The maximum bromine concentration shall not exceed 8.0 ppm at any time the PUBLIC SWIMMING POOL is open to BATHERS.

(e) Use of compressed CHLORINE gas shall be prohibited for new construction and after SUBSTANTIAL ALTERATION to existing PUBLIC SWIMMING POOLS. For existing facilities using CHLORINE gas, the following additional features shall be provided:

(1) The CHLORINE and chlorinating equipment shall be in a separate room with a shatter-proof ventilation system capable of 60 air changes per hour. Such rooms shall not be below ground level and shall be provided with a shatter-proof gas-tight inspection window. The door of the room shall not open to the PUBLIC SWIMMING POOL, and shall open to the exterior of the building or structure.

(2) The chlorinator equipment shall be of rugged design capable of withstanding wear without developing leaks.

(3) CHLORINE cylinders shall be anchored to prevent their falling over. A valve-stem wrench shall be maintained on the CHLORINE cylinders in use so the supply can be shut off quickly in the case of an emergency.

(4) The CHLORINE feeding device shall be designed so that during accidents or interruptions of the water supply, leaking CHLORINE gas will be conducted to the out-of-doors.

(5) The chlorinator shall be a solution feed-type capable of delivering CHLORINE at its maximum rate without releasing CHLORINE gas to the atmosphere.

(6) The chlorinators shall be designed to prevent the BACKFLOW of water into the CHLORINE solution container.

(7) Personal protective equipment, consisting of at least a gas mask designed for use in a CHLORINE atmosphere and of a type approved by the National Institute for Occupational Safety and Health (NIOSH) shall be stored directly outside one entrance of the room in which the chlorinator is maintained. In addition, a replacement canister shall be provided and a record shall be kept of gas mask usage to ensure that the mask will be serviceable when needed.

(8) A minimum of two self-contained breathing apparatus (SCBA) systems shall be on hand at all times and two QUALIFIED OPERATORS are to be involved in the changing of the tanks. One of the QUALIFIED OPERATORS should be stationed outside of the chemical room where the QUALIFIED OPERATOR inside can be seen at all times.

(9) An emergency direct line telephone shall be located by the door.

(f) Other sanitizers and disinfectants are acceptable when they are demonstrated to provide a readily measurable residual. Such sanitizers and disinfectants shall not create a hazardous condition or compromise disinfectant efficacy when used with required bromine and CHLORINE concentrations and not interfere with water quality measures meeting all criteria set forth in these rules and regulations.

(g) The PUBLIC SWIMMING POOL water shall be maintained in an alkaline condition as indicated by pH of not less than 7.2 and not over 7.8. A pH testing kit accurate to the nearest 0.2 pH unit shall be provided at each PUBLIC SWIMMING POOL.

(h) PUBLIC SWIMMING POOL water shall be chemically balanced. Total alkalinity shall be maintained in the range of 60-180 ppm. Calcium hardness shall not exceed 1,000 ppm. When the level of combined CHLORINE (chloramines) exceeds 0.4 ppm, actions shall be taken by the operator to reduce this level. Such actions shall include but are not limited to superchlorination,

water exchange, or PATRON adherence to appropriate BATHER hygiene practices. EPA-registered algaecides may be used provided that the product is labeled as an algaecide for PUBLIC SWIMMING POOL use and the product is used in strict compliance with label instructions.

(i) A water quality testing kit for measuring the concentration of the disinfectant residual, pH, alkalinity, CYA (if used), and temperature, certified to NSF/ANSI 50 by an ANSI-accredited certification organization, shall be provided at each POOL. FAC, combined AVAILABLE CHLORINE (CAC), or total bromine (TB), and pH shall be tested at all PUBLIC SWIMMING POOLS prior to opening each day. For all PUBLIC SWIMMING POOLS using an automated disinfectant feed system, FAC (or TB) and pH shall be tested every four hours while open to the public. PUBLIC SWIMMING POOLS using a manual disinfectant feed system that delivers disinfectant via a flow through erosion feeder or metering pump without an automated controller, FAC or bromine and pH shall be tested every two hours while open to the public. Total alkalinity shall be tested weekly. Total dissolved solids shall be tested quarterly. Calcium hardness and SATURATION INDEX shall be tested monthly. If used, CYA shall be tested 24 hours after the addition of CYA and monthly thereafter. If PUBLIC SWIMMING POOLS use stabilized CHLORINE as its primary disinfectant, the operator shall test CYA every two weeks.

(j) The maximum temperature for PUBLIC SWIMMING POOLS shall be 104°F.

(k) The new construction or SUBSTANTIAL ALTERATION of PUBLIC SWIMMING POOLS designed primarily for children under 5 years old, such as WADING POOLS, and THERAPY POOLS shall be required to use a SECONDARY DISINFECTION SYSTEM within one year of the effective date of these rules and regulations:

(1) SECONDARY DISINFECTION SYSTEMS shall be designed to achieve a minimum 3-log (99.9%) reduction in the number of infective *Cryptosporidium parvum* OOCYSTS per pass through the SECONDARY DISINFECTION SYSTEM.

(2) The SECONDARY DISINFECTION SYSTEM shall be located in the treatment loop (post filtration) and treat a portion (up to 100%) of the filtration flow prior to return of the water to the PUBLIC SWIMMING POOL.

(l) Removal of water from the POOL and replacement with make-up water shall be performed as needed to maintain water quality. A volume of water totaling at least four gallons per BATHER per day per PUBLIC SWIMMING POOL shall be discharged from the system or treated with an alternate system approved by the DEPARTMENT and reused.

§4620. Water Clarity.

The water in a PUBLIC SWIMMING POOL shall be sufficiently clear such that the bottom is visible while the water is static. To make this observation, a four-inch by four-inch marker tile in contrasting color to the POOL floor or main suction outlet shall be located at the deepest part of the POOL. For POOLS over 10 feet deep, an eight by eight-inch square marker tile, shall be used as a reference point. Such reference point shall be visible at all times at any point on the DECK up to 30 feet away in a direct line of sight from the tile or main drain.

§4621. Electrical Requirements.

Nothing in these rules and regulations shall be construed as providing relief from any applicable requirements of the National Electrical Code (NEC) or other applicable code.

(a) INDOOR SWIMMING POOLS and CHEMICAL STORAGE SPACES shall be considered wet and corrosive environments.

(b) Electrical conduit, devices or equipment shall not enter, pass through, or occupy an interior CHEMICAL STORAGE SPACE, except as required to service devices integral to the function of the room, such as pumps, vessels, controls, or lighting and SAFETY devices, if allowed by the local electrical code.

(c) Lamps, including fluorescent tubes, installed in interior CHEMICAL STORAGE SPACES shall be protected against breakage with a lens or other cover, or be otherwise protected against the accidental release of hot materials.

§4622. Lighting Requirements.

Lighting as described in this Section shall be provided for all outdoor PUBLIC SWIMMING POOLS open for use from 30 minutes before sunset to 30 minutes after sunrise, or during periods of natural illumination below the levels required in this Section.

(a) EQUIPMENT ROOMS and INDOOR SWIMMING POOL water surface shall be lighted to provide a minimum of 30 horizontal foot candles of illumination. Outdoor water surface and DECK shall have a minimum maintained light level of ten horizontal foot candles of illumination.

(b) Where outdoor POOLS are open for use for night swimming, or during periods of low illumination, underwater lighting may be excluded where maintained POOL surface lighting levels are a minimum of 15 horizontal foot candles, and all portions of the POOL, including the bottom and drain(s), are readily visible as required in §4620.

(c) Where underwater lighting is used, not less than 0.5 watts shall be employed per square foot of PUBLIC SWIMMING POOL water surface area. Such lights shall be spaced to provide illumination so that all portions of the POOL, including the bottom and drain(s), may be seen readily without glare. Dimmable lighting shall not be used for underwater lighting.

(d) When underwater POOL lighting fixtures are provided, they shall be installed so as not to create a SAFETY hazard to BATHERS. Branch circuits that supply underwater lights operating at more than the Low Voltage Contact Limit as defined in NEC 680.2 must be GROUND-FAULT CIRCUIT INTERRUPTER (GFCI) protected. The top of lens of the underwater lighting fixtures should be at least eighteen inches below water level of POOL. Lighting shall be such that lifeguards may see every part of the PUBLIC SWIMMING POOL, all diving boards, or other appurtenances, without being blinded by the light. Lights, appliances, and wiring shall be installed and grounded in accordance with the local electrical code. Overhead electrical wiring shall be designed and located so that wires cannot possibly fall on the PUBLIC SWIMMING POOL ENCLOSURES.

(e) No lighting controls shall be accessible to PATRONS or BATHERS.

(f) Outdoor POOLS, or POOLS with adequate natural light that are intended for daylight use only, shall prominently post signs which are legible at all entrances and which state that swimming after dark is not permitted in accordance with these rules and regulations.

§4623. Ventilation Requirements.

All INDOOR SWIMMING POOLS, SHOWER facilities, dressing rooms, toilet spaces, CHEMICAL STORAGE SPACES, and mechanical rooms shall be adequately ventilated either by natural or mechanical means and shall comply with ASHRAE Standard 62.1 2013, *Ventilation for Acceptable Indoor Air Quality*.

§4624. Theoretical Peak Occupancy.

(a) The THEORETICAL PEAK OCCUPANCY for a PUBLIC SWIMMING POOL shall be used for designing systems that serve BATHERS and PATRONS, and shall incorporate non-water related

areas such as DECKS and other adjacent portions of the PUBLIC SWIMMING POOL not associated with the PUBLIC SWIMMING POOL.

(b) The THEORETICAL PEAK OCCUPANCY shall be calculated by dividing the surface area in square feet of the PUBLIC SWIMMING POOL by the density factor (D) that fits the specific PUBLIC SWIMMING POOL being considered.

THEORETICAL PEAK OCCUPANCY = PUBLIC SWIMMING POOL Surface Area / D

The density factors (D) are:

Water/BATHER-related:

(1) FLAT WATER density factor = 20 sq. ft. per BATHER

(2) AGITATED WATER density factor = 15 sq. ft. per BATHER

(3) HOT WATER density factor = 10 sq. ft. per BATHER

(4) WATERSLIDE LANDING POOL density factor = manufacturer-established capacity at any given time.

(5) Interactive water play water density factor = 10 sq. ft. per BATHER on surface.

(6) SURF POOL density factor = manufacturer-established capacity at any given time.

Non-water/PATRON-related:

(7) DECK density factor = 50 sq. ft. per BATHER.

(8) Stadium seating density factor = 6.6 sq. ft. per BATHER

(c) The density factors in (b) of this Section may be modified for higher BATHER or PATRON density, but they shall not be modified to result in less BATHERS per square foot than listed.

(d) The THEORETICAL PEAK OCCUPANCY shall be determined by adding the calculations for each PUBLIC SWIMMING POOL in the facility

§4625. Hygiene Facilities Requirements.

(a) A PUBLIC SWIMMING POOL designed primarily for use by children less than five years of age shall have, at a minimum, a drinking fountain, toilet, SHOWER facilities, HANDWASHING STATION, and DIAPER-CHANGING STATION located no greater than 200 feet walking distance and in clear view from the nearest entry/exit of the PUBLIC SWIMMING POOL. All other PUBLIC SWIMMING POOLS, except those exempted under §4625 (l), shall have a drinking fountain, toilet, SHOWER facilities, and HANDWASHING STATION located no greater than 300 feet walking distance from each PUBLIC SWIMMING POOL.

(b) All PUBLIC SWIMMING POOLS allowing use by diaper-aged BATHERS (i.e., children less than five years of age) shall have at least one DIAPER-CHANGING STATION in each male and female HYGIENE FACILITY or make available a unisex DIAPER-CHANGING STATION. DIAPER CHANGING UNITS shall conform to the ASTM Standard F2285-04*: Consumer Performance Standards for Commercial Diaper-Changing Stations* or the STANDARDS for diaper-changing surfaces in the most current version of *Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care Programs*.

(c) If a hand wash sink is not available adjacent to the DIAPER-CHANGING STATION, a portable HANDWASHING STATION shall be available adjacent to the station at all times. In addition, a covered, hands-free, plastic-lined trash receptacle or diaper pail shall be located directly adjacent to the DIAPER-CHANGING UNIT.

(d) The minimum number of CLEANSING SHOWERS shall be one per gender for PUBLIC SWIMMING POOLS less than 4,000 square feet in collective surface area. An additional CLEANSING

SHOWER per gender shall be added for each additional 4,000 square feet of POOL space or portion thereof. CLEANSING SHOWERS shall be evenly distributed between genders, as applicable. The layout of the SHOWER rooms shall be such that the BATHERS on leaving the dressing room pass the toilets and SHOWERS enroute to the PUBLIC SWIMMING POOL.

(e) SHOWERS shall be supplied with soap in a soap dispenser, and water at a rate of at least three gallons per minute per SHOWER head.

(f) Entryways to private or group CLEANSING SHOWER areas shall be enclosed by a door or curtain made of smooth, easy-to-clean material.

(g) A minimum of one RINSE SHOWER shall be provided on the DECK near an entry point to the PUBLIC SWIMMING POOL or arranged to encourage BATHERS to use the RINSE SHOWER prior to entering the POOL. A minimum of four showerheads per 50 feet of beach entry POOLS shall be provided as a RINSE SHOWER. A minimum of one RINSE SHOWER shall be provided at each entrance to a LAZY RIVER and WATERSLIDE queue line.

(h) PUBLIC SWIMMING POOLS with 7,500 square feet of water area or more may be flexible in the number of SHOWERS they provide based on the THEORETICAL PEAK OCCUPANCY in §4624 provided the following requirements are met:

(1) 25% of the required SHOWERS shall be CLEANSING SHOWERS;

(2) 25% of the required SHOWERS shall be RINSE SHOWERS; and

(3) the remaining 50% may be either CLEANSING or RINSE SHOWERS.

(i) All floors and other surfaces which may be walked on by BATHERS shall have a smooth, easy-to-clean, impervious-to-water, slip-resistant surface. Floors shall be sloped to drain water or other liquids.

(j) Walls, partitions, doors, lockers, and similar surfaces which require periodic cleaning shall be of impervious material, smooth, and finished so as to facilitate thorough scrubbing. Interior walls and partitions shall terminate not less than six inches above the floor, or shall rest on masonry or concrete not less than four inches above the floor. Junctures inside the building between all walls or partitions and floors of structures shall be covered.

(k) Lockers shall be set either on solid masonry bases four inches high or on legs with bottom of locker at least ten inches above the floor. Lockers shall be properly vented.

(l) The requirement relating to dressing rooms and SHOWERS shall be waived, if requested by owner, for POOLS with use limited to the tenants of the specific motel, apartment complex, condominium, or hotel that is served, and whose PATRONS use these facilities in their own quarters before entering the POOL. If toilets in the private quarters or public sections of these establishments are available to all swimmers within a travel distance of three hundred feet from a POOL, and are located not more than two floors above or below the POOL DECK, toilet facilities will not have to be provided at the POOL DECK. Drinking fountains will not be required at POOLS for motels, apartment complexes, condominiums or hotels.

(m) Unless exempted by (l) of this Section, toilet and handwashing facilities shall be provided for the THEORETICAL PEAK OCCUPANCY as computed under §4624 on the basis of the fixture schedule on Table 9.

Table 9. Minimum Required Plumbing Fixtures		
Hygiene Facility	Males	Females
Toilets	1/75	1/40
Urinals	1/75	----
Handwashing Sinks	1/100	1/100
Fixture schedules may be increased in public swimming pools at school, camps, or similar locations where bather loads may reach peaks due to schedules of use.		

(n) HYGIENE FACILITY floors, walls, and ceilings shall be kept clean and free of visible mold and mildew at all times.

(o) HYGIENE FACILITY fixtures, dressing area fixtures, and furniture shall be cleaned and SANITIZED daily, and more often if necessary, with an EPA-registered product.

(p) HYGIENE FACILITY fixtures shall be maintained in good repair. Toilet tissue shall be provided in toilet rooms and soap and paper towels shall be provided at each handwashing sink. A minimum of one hands-free trash receptacle shall be provided in areas adjacent to handwashing sinks.

(q) FOOT BATHS shall be prohibited.

§4626. Bathing Suits, Caps, and Towels.

Reusable bathing suits, caps, and towels furnished to PUBLIC SWIMMING POOL users by the management shall be laundered and/or cleaned, and SANITIZED after each usage. Adequate STORAGE shall be provided for storing clean suits, towels, and other shared equipment, and shall be separate from used or unclean materials.

§4627. Barriers and Enclosures.

(a) All PUBLIC SWIMMING POOLS, CHEMICAL STORAGE SPACES, and mechanical spaces shall be enclosed to prevent unauthorized entry. The ENCLOSURE may consist of any combination of building envelopes, site walls, or fencing and shall not be less than six feet in height measured from the finished grade to the top of the BARRIER on the side outside of the BARRIER surrounding the PUBLIC SWIMMING POOL. Chain-link fencing constructed of a maximum opening of 1 ¾ inches mesh shall be permitted.

(b) All primary public access gates or doors serving as part of a PUBLIC SWIMMING POOL ENCLOSURE or required PUBLIC SWIMMING POOL ENCLOSURE shall be self-closing and self-

latching from any open position. All gates or doors shall be capable of being locked from the exterior and shall be at least equal in height at top and bottom to the BARRIER of which they are a component. Turnstiles shall not form a part of a PUBLIC SWIMMING POOL ENCLOSURE. For unguarded PUBLIC SWIMMING POOLS, self-latching mechanisms must be located not less than four and a half feet above finished grade.

§4628. Visitor and Spectator Areas.

(a) When a spectator area or an access to a spectator area is located within the PUBLIC SWIMMING POOL ENCLOSURE, the DECK adjacent to the area or access shall provide egress width for the spectators in addition to the width required by §4617. The additional width shall be based on the egress requirements in the applicable building code based on the THEORETICAL PEAK OCCUPANCY of the PUBLIC SWIMMING POOL served with a minimum width of four feet.

(b) A BARRIER located on the DECK to separate the DECK used by spectators from the PERIMETER DECK used by BATHERS may have one or more openings directly into the BATHER areas with a demarcation line on the DECK that shows the separation between the DECK used by spectators and the PERIMETER DECK used by BATHERS.

(c) A spectator or other area located in a balcony within ten feet of or overhanging any portion of a PUBLIC SWIMMING POOL shall be designed to deter jumping or diving into the PUBLIC SWIMMING POOL.

(d) No food or drink shall be permitted in the immediate area of the PUBLIC SWIMMING POOL or on the DECKS surrounding the POOL except that food and beverage will be allowed in the visitor and spectator area, or in a similarly separated snack area for BATHERS, if beverages are served in non-breakable containers and trash containers are provided to keep litter off of the POOL DECKS.

§4629. Cleaning and Maintenance.

(a) The PUBLIC SWIMMING POOL wall, floor, walkway, and DECK floor shall be kept clean and free from accumulation of algae, mold, mildew, and/or slime.

(b) Floating scum, sputum, and debris in the PUBLIC SWIMMING POOL shall be removed within twenty-four hours or more frequently as required. Visible dirt on the bottom of a PUBLIC SWIMMING POOL shall be removed at least once each day.

(c) All parts of the POOL shall be maintained in good repair. Floors shall be kept free from cracks and other defects, and shall conform with §4607. Walls, ceilings, and equipment shall be painted as often as necessary to be kept in good condition.

(d) The whole POOL area shall be kept clean and sanitary, free of litter, and pests. Hoses shall be maintained for regular flushing and cleaning. During extended periods of non-use when the recirculation and purification is not functioning, POOLS shall be maintained so as to prevent their becoming a mosquito breeding source. This shall be accomplished by securely covering, draining the POOL of all water, and keeping the POOL free of standing water; or by some other means as approved by the DEPARTMENT.

§4630. Wading Pool.

In addition to the general PUBLIC SWIMMING POOL requirements stated in these rules and regulations, WADING POOLS shall be separated from other POOLS by a BARRIER that meets the requirements of §4627, unless the WADING POOL is separated by a distance of 15 feet from other bodies of water. WADING POOLS near other WADING POOLS shall not be required to be separated by a BARRIER.

§4631. Spas.

In addition to the general PUBLIC SWIMMING POOL requirements stated in these rules and regulations, SPAS shall comply with the following provisions:

(a) The maximum water depth in SPAS shall be four feet measured from the designed static water line except for SPAS that are designed for special use and purposes and approved by the DEPARTMENT.

(b) The maximum submerged depth of any seat or sitting bench shall be 28 inches measured from the water line.

(c) A SPA shall have one or more suitable, slip-resistant handhold(s) around the perimeter and not over 12 inches above the water line.

(d) Interior steps or stairs shall be provided where SPA depths are greater than 24 inches. Each set of steps shall be provided with at least one handrail to serve all treads and risers.

(e) Elevated SPAS may be located adjacent to another PUBLIC SWIMMING POOL as long as there is an effective BARRIER between the SPA and the adjacent PUBLIC SWIMMING POOL, or a minimum distance of four feet between the PUBLIC SWIMMING POOL and SPA is provided.

(f) A minimum of two depth markers shall be provided regardless of the shape or size of the SPA.

(g) Water temperatures shall not exceed 104°F.

(h) The agitation system shall be connected to a minute timer that does not exceed 15 minutes that shall be located out of reach of a BATHER in the SPA.

(i) All SPAS shall have a clearly labeled emergency shutoff or control switch for the purpose of stopping the motor(s) that provide power to the RECIRCULATION SYSTEM and hydrotherapy or agitation system that shall be installed and be readily accessible to the BATHERS, in accordance with the NEC.

(j) SPAS shall have a minimum of two adjustable filter system INLETS spaced at least three feet apart and designed to distribute flow evenly.

§4632. Water Slides.

(a) The design engineer shall address compliance with the following STANDARDS and must provide documentation and/or certification that the WATERSLIDE design is in conformance with these STANDARDS:

(1) ASTM F2376-13: *Standard Practice for Classification, Design, Manufacture, Construction, and Operation of Water Slide Systems; and*

(2) ASTM F2469-09: *Standard Practice for Manufacturer, Construction, Operation, and Maintenance of Aquatic Play Equipment.*

(b) Signs indicating riding instructions, warnings, and requirements in accordance with the manufacturer recommendations shall be posted at the WATERSLIDE entry.

(c) FLUME surfaces shall be inert, nontoxic, smooth, and easily cleaned. All FLUME valleys and dips shall have proper drainage, SAFETY measures that insure a rider cannot fall from the FLUME, and a means of egress in the event the ride malfunctions or a rider stops on the ride. The exit of any FLUME must be designed to ensure that BATHERS enter the LANDING POOL or SLIDE RUNOUT at a safe speed and angle of entry. If a WATERSLIDE has two or more FLUMES and there is a point of intersection between the centerlines of any two FLUMES, the distance between that point and the point of exit for each intersecting FLUME must not be less than the SLIDE manufacturer's recommendations and ASTM F2376.

(d) WATERSLIDES shall be designed to terminate at or below water level, except for DROP SLIDES or unless otherwise permitted by the WATERSLIDE manufacturer and ASTM F2376. WATERSLIDES shall be perpendicular to the wall of the PUBLIC SWIMMING POOL at the point of

exit unless otherwise permitted by the WATERSLIDE manufacturer. WATERSLIDES shall be designed with an exit system which shall be in accordance with the WATERSLIDE manufacturer's recommendations and ASTM F2376, and provides for safe entry into the LANDING POOL or WATERSLIDE RUNOUT.

(e) If steps are provided instead of exit ladders or RECESSED STEPS with grab rails, they shall be installed at the opposite end of the LANDING POOL from the FLUME exit and a handrail shall be provided.

(f) If the WATERSLIDE FLUME ends in a PUBLIC SWIMMING POOL, the landing area shall be divided from the rest of the PUBLIC SWIMMING POOL by a float line, wing wall, peninsula, or other similar feature to prevent collisions with other BATHERS.

(g) A PERIMETER DECK shall be provided along the exit side of the LANDING POOL. In addition, a walkway, steps, stairway or ramp shall be provided between the LANDING POOL and the top of the FLUME.

(h) There shall be a SLIDE landing area in accordance with the SLIDE manufacturer's recommendations and ASTM F2376. This area shall not infringe on the landing area for any other SLIDES, diving equipment, or any other minimum PUBLIC SWIMMING POOL clearance requirements. The minimum required water depth shall be in accordance with the SLIDE manufacturer's recommendations and ASTM F2376.

(i) The landing area of the SLIDE shall be protected through the use of a float line, wing wall, peninsula. or other similar impediment to prevent collisions with other BATHERS.

§4633. Lazy Rivers.

In addition to the general PUBLIC SWIMMING POOL requirements stated in these rules and regulations, LAZY RIVERS shall comply with the following additional provisions:

(a) Handrails, steps, stairs, and propulsion jets for LAZY RIVERS shall not protrude into the river.

(b) Means of access/egress shall be provided at 150-foot intervals around the LAZY RIVER.

(c) A DECK shall be provided along the entire length of the LAZY RIVER.

(d) Obstructions around the perimeter of the LAZY RIVER, such as bridges or landscaping, shall be allowed provided they do not impact lifeguarding, sight lines, or rescue operations. All bridges spanning a LAZY RIVER shall have a minimum clearance of both seven feet from the bottom of the LAZY RIVER and four feet above the water surface to any structure overhead.

§4634. Qualified Operator.

(a) Every PUBLIC SWIMMING POOL shall be under the supervision of a QUALIFIED OPERATOR who shall assume the responsibility for compliance with all parts of these rules and regulations relating to POOL operation and maintenance and SAFETY of BATHERS. A QUALIFIED OPERATOR shall have completed an operator training course that is recognized by the DEPARTMENT. Originals or copies of such course certificate or documentation shall be available on site for inspection by the health officer for each QUALIFIED OPERATOR employed at or contracted by the site.

(b) A QUALIFIED OPERATOR shall be on-site or immediately available within two hours during all hours of operation at a PUBLIC SWIMMING POOL that:

(1) Has more than two PUBLIC SWIMMING POOLS;

(2) Has over 50,000 gallons of water;

(3) Include features with recirculated water;

(4) Is used as a THERAPY POOL or to provide swimming training;

(5) Allows BATHER count of greater than 200 BATHERS daily;

(6) Is operated by a municipality or a school; or

(7) Has a history of repeated violations of these rules and regulations which in the opinion of the health officer requires one or more on-site QUALIFIED OPERATORS.

(c) All other PUBLIC SWIMMING POOLS shall have an on-site QUALIFIED OPERATOR immediately available within two hours or a contract with a QUALIFIED OPERATOR for a minimum of weekly visits and assistance whenever needed.

(d) A QUALIFIED OPERATOR shall keep operation, SAFETY, emergency, and training plans on file at the facility. In addition, records pertaining to the operation, maintenance and management of the PUBLIC SWIMMING POOL, such as chemical inventory log, water monitoring and testing records, and other records required in these rules and regulations shall be maintained. Such records shall be kept for a minimum of three years and shall be available upon request by the health officer.

(e) The QUALIFIED OPERATOR shall ensure that a daily preventive maintenance inspection for PUBLIC SWIMMING POOLS listed in (b) of this Section is done before opening and that it shall include the following:

(1) Walkways/DECK and exits are clear, clean, free of debris;

(2) Drain covers, vacuum fitting covers, SKIMMER equalizer covers, and any other suction outlet covers are in place, secure, and unbroken;

(3) SKIMMER baskets, weirs, lids, flow adjusters, and suction outlets are free of any blockage;

(4) INLET and return covers and any other fittings are in place, secure, and unbroken;

(5) SAFETY warning signs and other signage are in place and in good repair;

(6) SAFETY equipment as required by these rules and regulations are in place and in good repair, including emergency instructions and phone numbers;

(7) Entrapment prevention systems are operational;

(8) Recirculation, DISINFECTION systems, controller(s), and probes are operating as required;

(9) SECONDARY DISINFECTION SYSTEMS are operating as required;

(10) Underwater lights and other lighting are intact with no exposed wires or water in lights;

(11) Slime and biofilm have been removed from accessible surfaces of PUBLIC SWIMMING POOL SLIDES, and other features;

(12) Doors to non-public areas (CHEMICAL STORAGE SPACES, offices, etc.) are locked;

(13) First aid supplies are stocked;

(14) Emergency communication equipment and systems are operational;

(15) Fecal/vomit/blood incident contamination response protocols, materials, and equipment are available;

(16) Water features and amenities are functioning in accordance with the manufacturer's recommendations;

(17) Fencing/BARRIERS, gates, and self-latching or other locks are tested and are intact and functioning properly, and BARRIERS do not have nearby furniture to encourage climbing;

(18) Drinking fountains are clean and in functional condition;

(19) Electrical devices are in good working condition and meet the requirements specified in the NEC and these rules and regulations;

(20) Alarms, if required, are tested and functioning properly; and

(21) Assessing water clarity such that the bottom and objects in the POOL are clearly visible.

§4635. Safety Requirements.

(a) PUBLIC SWIMMING POOLS operated primarily for unorganized use and having an area of more than two thousand two hundred fifty square feet of water surface area, shall be provided with an elevated lifeguard platform or chair. In POOLS with four thousand square feet or more of water surface area, additional elevated chairs or stations located so as to provide a clear unobstructed view of the POOL bottom in the area under surveillance shall be provided. (Ideally, chairs should be placed in locations which eliminate sun glare on the water, and in positions which will give complete coverage of the POOL within a field view limited to 45^0 on either side of a line of sight extending straight out from the chair.)

(b) Enough acoustical treatment, including material and ceiling design, shall be given to enclosed POOL rooms to control noise levels. It is essential for SAFETY that swimmers be able to hear signals and directions of routine supervision as well as emergency control.

(c) When the POOL is not open for use, access to the POOL shall be prevented.

(d) At all POOLS, diagrammatic illustrations of artificial respiration procedures shall be posted where clearly visible from the nearby DECK and shall be protected against the elements. Also, the location and telephone number of the nearest ambulance, hospital, fire, or police rescue service, physician, and POOL operator shall be kept similarly posted together with instructions that in case of need, manual or mouth-to-mouth artificial respiration should be started immediately and continued until a physician arrives or mechanical resuscitators are applied.

(e) Whenever the POOL is opened for use and no lifeguard service is provided, the warning sign shall be placed in plain view and shall state "Warning -- No Lifeguard on Duty" with clearly visible letters at least four inches high. In addition, the sign shall also state "Children under the age of 14 should not use POOL without direct adult supervision."

(f) The PUBLIC SWIMMING POOL, as necessary, shall have a functional telephone or other communication system or device that is hard wired and capable of directly dialing 911 or function as the emergency notification system. The telephone or communication system or device shall be conspicuously provided and accessible to PUBLIC SWIMMING POOL users such that it can be reached immediately. Alternate functional systems, devices, or communication processes are allowed with the DEPARTMENT's approval in situations when a hardwired telephone is not logistically sound, and an alternate means of communication is available. A permanent sign providing emergency dialing directions and the PUBLIC SWIMMING POOL address shall be posted and maintained at the emergency telephone, system or device.

§4636. Lifesaving Equipment, First-Aid Kit.

(a) PUBLIC SWIMMING POOLS whose depth exceeds two feet of standing water shall provide and maintain a U.S. Coast Guard-approved PUBLIC SWIMMING POOL rescue throwing device, with at least a quarter-inch thick rope whose length is 50 feet or 1 and ½ times the width

of the POOL, whichever is less. The rescue throwing device shall be located in the immediate vicinity to the PUBLIC SWIMMING POOL and be accessible to BATHERS.

(b) PUBLIC SWIMMING POOLS whose depth exceeds two feet of standing water shall provide and maintain a reaching pole of 12-foot to 16-foot in length, non-telescopic, light in weight, and with a securely attached Shepherd's Crook with an aperture of at least 18 inches. The reaching pole shall be located in the immediate vicinity to the PUBLIC SWIMMING POOL and be accessible to BATHERS and PATRONS.

(c) When any POOL is of such size that unaided swimming rescues by lifeguards may not offer sufficient protection to swimmers, one or more square-sterned boats equipped with oars, oarlocks, life rings, or paddle boards shall be provided.

(d) Every PUBLIC SWIMMING POOL shall be equipped with a STANDARD first-aid kit which shall be kept filled and ready for use. Signage shall be provided at the PUBLIC SWIMMING POOL which clearly identifies first aid location(s). Availability of a kit in the office of the resident manager for a motel, apartment complex, condominium, or hotel shall satisfy this requirement for such POOLS.

(e) Lifesaving equipment shall be mounted in conspicuous areas around the PUBLIC SWIMMING POOL DECK, at lifeguard chairs, or elsewhere, readily accessible, its function plainly marked, and kept in repair and ready condition. BATHERS or other PERSONS shall not be permitted to tamper with or remove such equipment from its established location for any purpose other than the intended emergency use.

§4637. Qualified Lifeguards.

(a) One or more QUALIFIED LIFEGUARDS shall be on duty at POOL side at all times when the PUBLIC SWIMMING POOL is open to use by BATHERS except at POOLS with less than

2,250 square feet of water surface. Such attendant should be in full charge of bathing and have authority to enforce all rules of SAFETY and sanitation.

(b) A QUALIFIED LIFEGUARD shall:

(1) Be a capable swimmer and be competent in lifesaving methods;

(2) Be trained in administration of artificial respiration and other first-aid measures;

(3) Have satisfactorily completed a lifeguard training course recognized by the DEPARTMENT. The valid and current certificate of completion of the course of instruction shall be available for verification;

(4) Be dressed suitably to enter the water and to take action on an emergency; and

(5) Not engaged in activities which would distract his attention from proper supervision of BATHERS using the PUBLIC SWIMMING POOL or prevent immediate attention to a BATHER in distress in the water.

(c) Each QUALIFIED LIFEGUARD conducting PATRON surveillance with the responsibility of in-water rescue in less than three feet of water shall have a rescue tube immediately available for use. Each QUALIFIED LIFEGUARD conducting PATRON surveillance in a water depth of three feet or greater shall have a rescue tube on his/her PERSON in a rescue ready position.

(d) PUBLIC SWIMMING POOLS with standing water and with any of the following conditions shall be required to have a lifeguard(s) conducting PATRON surveillance at all times the PUBLIC SWIMMING POOL is open.

(1) Any PUBLIC SWIMMING POOL deeper than five feet at any point;

(2) Any PUBLIC SWIMMING POOL that allows for unsupervised children under the age of 14 years;

(3) Any PUBLIC SWIMMING POOL while it is being used for the recreation of youth groups, including but not limited to childcare usage or school groups;

(4) Any PUBLIC SWIMMING POOL while it is being used for group training must have a dedicated lifeguard on DECK for class surveillance, including but not limited to competitive swimming and/or sports, lifeguard training, exercise programs, and swimming lessons;

(5) Any PUBLIC SWIMMING POOL with a configuration in which any point on the PUBLIC SWIMMING POOL surface exceeds 30 feet from the nearest DECK;

(6) Any PUBLIC SWIMMING POOL with an induced current or wave action including but not limited to WAVE POOLS and LAZY RIVERS;

(7) WATERSLIDE LANDING POOLS; and

(8) Any PUBLIC SWIMMING POOL in which BATHERS enter the water from any height above the DECK including but not limited to diving boards, DROP SLIDES, starting platforms, and/or climbing walls. This does not include POOL SLIDES.

(e) When QUALIFIED LIFEGUARDS are used, the facility shall create and implement a staffing plan which includes diagrammed zones of PATRON surveillance for each PUBLIC SWIMMING POOL such that:

(1) The QUALIFIED LIFEGUARD is capable of viewing the entire area of the assigned zone of PATRON surveillance;

(2) The QUALIFIED LIFEGUARD is able to reach the furthest extent of the assigned zone of PATRON surveillance within 20 seconds;

(3) Identify whether the QUALIFIED LIFEGUARD is in an elevated stand, walking, in-water and/or other approved position;

(4) Identifying any additional responsibilities for each zone; and

(5) All areas of each PUBLIC SWIMMING POOL are assigned a zone of PATRON surveillance and all zones of PATRON surveillance are staffed during operation.

(f) Employees who are ill with diarrhea shall not be permitted to enter the water or perform in a QUALIFIED LIFEGUARD role. Employees with open wounds shall be permitted in the water or in a QUALIFIED LIFEGUARD role only if they have healthcare provider approval or wear a waterproof, occlusive bandage to cover the wound.

§4638. Supervision of Bathers.

(a) POOL staff should encourage the following personal conduct regulations:

(1) All BATHERS shall be instructed to use the toilet, and particularly to urinate, before taking a cleansing bath and entering the POOL;

(2) All PERSONS using the PUBLIC SWIMMING POOL shall take a CLEANSING SHOWER bath in the nude, using warm water and soap and thoroughly rinsing off all suds, before entering the PUBLIC SWIMMING POOL room or ENCLOSURE. A BATHER leaving the POOL to use the toilet shall take another cleansing bath before returning to the PUBLIC SWIMMING POOL room or ENCLOSURE;

(3) Any PERSON having an infectious or communicable disease shall be excluded from a PUBLIC SWIMMING POOL. PERSONS having any considerable area of exposed sub-epidermal tissue, open blisters, cuts, etc., shall be warned that these are likely to become infected and advised not to use the POOL;

(4) Spitting, spouting of water, blowing the nose, etc., in the PUBLIC SWIMMING POOL shall be strictly prohibited; and

(5) No running, boisterous or rough play, except supervised water sports, shall be permitted in the POOL, on the runways, DECK, diving boards, floats, platforms, or in dressing rooms, SHOWER rooms, etc.

(b) Signage shall be placed in a conspicuous place at the entrance of the PUBLIC SWIMMING POOL communicating expected and prohibited behaviors listed under (a) of this Section using text that complies with the intent of the said information.

§4639. Injury and Illness Incident Reporting.

A full report of any injury or illness incident occurring at a PUBLIC SWIMMING POOL shall be reported by the POOL owner/operator to the DEPARTMENT within 24 hours of its occurrence, and a notation recorded in a log book. This shall include all incidents occurring at a PUBLIC SWIMMING POOL which:

(a) result in death;

(b) require resuscitation;

(c) require referral to a hospital or other facility for medical attention; or

(d) is a BATHER illness associated with bathing water quality.

§4640. Water Contamination Response.

(a) In the event of a fecal or vomit contamination in a PUBLIC SWIMMING POOL, the QUALIFIED OPERATOR shall immediately close the PUBLIC SWIMMING POOL to BATHERS until remediation procedures are complete. This closure shall include the affected PUBLIC SWIMMING POOL and other PUBLIC SWIMMING POOLS that share the same RECIRCULATION SYSTEM.

(b) Contaminating material shall be removed (e.g., using a net, scoop, or bucket) and disposed of in a sanitary manner. Fecal or vomit contamination of the item used to remove the contamination (e.g., the net or bucket) shall be removed by thorough cleaning followed by DISINFECTION (e.g., after cleaning, leave the net, scoop, or bucket immersed in the POOL during the DISINFECTION procedure prescribed for formed-stool, diarrheal-stool, or vomit contamination, as appropriate). PUBLIC SWIMMING POOL vacuum cleaners shall not be used for removal of contamination from the water or adjacent surfaces unless vacuum waste is discharged to a sanitary sewer and the vacuum equipment can be adequately disinfected.

(c) PUBLIC SWIMMING POOL water that has been contaminated by feces or vomit shall be treated as follows:

1) Check to ensure that the water's pH is 7.5 or lower and adjust if necessary;

2) Verify and maintain water temperature at 77°F or higher;

3) Operate the filtration/RECIRCULATION SYSTEM while the POOL reaches and maintains the proper free CHLORINE concentration during the remediation process;

4) Test the CHLORINE residual at multiple sampling points to ensure the proper free CHLORINE concentration is achieved throughout the POOL for the entire DISINFECTION time; and

5) Use only non-stabilized CHLORINE products to raise the free CHLORINE levels during the remediation.

(d) Formed-stool contaminated water shall have the FREE CHLORINE RESIDUAL checked and the FREE CHLORINE RESIDUAL raised to 2.0 mg/L (if less than 2.0 mg/L) and maintained for at least 25 minutes (or an equivalent time and concentration to reach the CT VALUE) before reopening the PUBLIC SWIMMING POOL.

(e) Diarrheal-stool contaminated water shall:

1) Check the FREE CHLORINE RESIDUAL and then raise the FREE CHLORINE RESIDUAL to 20.0 mg/L and maintain for at least 12.75 hours (or an equivalent time and concentration to reach the CT VALUE) before reopening the PUBLIC SWIMMING POOL, or

2) Circulate the water through a SECONDARY DISINFECTION SYSTEM to theoretically reduce the number of *Cryptosporidium* OOCYSTS in the PUBLIC SWIMMING POOL below one OOCYST/100 mL.

(f) In PUBLIC SWIMMING POOL water that contains CYA or a stabilized CHLORINE product, water shall be treated by:

(1) Hyperchlorination accomplished by:

(i) Following the preparatory guidance outlined in (c) of this Section;

(ii) Lowering the CYA concentration to less than or equal to 15 ppm by draining, if necessary;

(iii) Raising the FREE CHLORINE RESIDUAL to 20 mg/L for at least 28 hours; 30 mg/L for at least 18 hours; 40 mg/L for at least 8.5 hours; or an equivalent time and concentration needed to reach the CT INACTIVATION VALUE;

(iv) Measurement of the inactivation time required shall start when the PUBLIC SWIMMING POOL reaches the intended FREE CHLORINE RESIDUAL level or;

(2) Circulating the water through a SECONDARY DISINFECTION SYSTEM to theoretically reduce the number of *Cryptosporidium* OOCYSTS in the PUBLIC SWIMMING POOL below one OOCYST/100 mL; or

(3) Draining the PUBLIC SWIMMING POOL completely.

(g) Vomit-contaminated water shall have the FREE CHLORINE RESIDUAL checked and the FREE CHLORINE RESIDUAL raised to 2.0 mg/L (if less than 2.0 mg/L) and maintained for at least 25 minutes (or an equivalent time and concentration to reach the CT VALUE) before reopening the PUBLIC SWIMMING POOL.

(h) In PUBLIC SWIMMING POOL water that contains CYA or a stabilized CHLORINE product, water shall be treated by doubling the inactivation time required in these rules and regulations. Measurement of the inactivation time required shall start when the PUBLIC SWIMMING POOL reaches the intended free CHLORINE level.

(i) If a bodily fluid, such as feces, vomit, or blood, has contaminated a surface in a PUBLIC SWIMMING POOL, facility staff shall limit access to the affected area until remediation procedures have been completed. All visible CONTAMINANT shall be removed and the contaminated surface cleaned and disinfected.

§4641. Inspection and Grading.

(a) Access.

An employee or representative of the DEPARTMENT shall, after proper presentation of credentials, have access to any PUBLIC SWIMMING POOL at any reasonable time for the purpose of making inspections to determine compliance with these rules and regulations. Denial of access shall be cause for suspension of the Sanitary Permit.

(b) Report of Inspections.

Whenever an inspection of a PUBLIC SWIMMING POOL is conducted, the findings shall be recorded on a form authorized by the DIRECTOR, shall summarize the requirements of these rules and regulations, and shall set forth a demerit value for each requirement. Demerit value assignments shall be from one through six. Inspection remarks shall be written to reference, by

section number, the section violated, and shall state the correction to be made. The rating score of the establishment shall be the total of the demerit values for all violations. A copy of the completed inspection report form shall be issued to the operator of the establishment at the conclusion of the inspection. The completed form is a public document that shall be made available for public disclosure to any person who requests it according to law.

(c) Appeal.

The report of inspection of a PUBLIC SWIMMING POOL shall state that an opportunity for appeal from any notice or inspection findings will be provided if a written request for a hearing is filed with the DIRECTOR within the period of time established in the notice for correction.

(d) Grading.

(1) Grades of a PUBLIC SWIMMING POOL shall be as follows:

(i) Grade A: An establishment having a demerit score of not more than ten;

(ii) Grade B: An establishment having a demerit score of more than ten but not more than twenty;

(iii) Grade C: An establishment having a demerit score of more than twenty but not more than forty; and

(iv) Grade D: An establishment having a demerit score of more than forty.

(2) The DEPARTMENT shall issue a placard reflecting the letter grade of the most recent inspection.

(3) The DEPARTMENT shall establish a specific and reasonable period of time for correction of the violations found, in accordance with the following provision:

(i) When the demerit score of the establishment is twenty or less, all violations of one through five demerits must be corrected within a period of time not to exceed 30 days; or

(ii) When the demerit score of the establishment is more than twenty but less than forty-one, all items of one through five demerit points must be corrected within a period of time not to exceed 15 days; or

(iii) When one or more six demerit point items are in violation, regardless of demerit score, such items must be corrected within a period of time not to exceed 10 days; and

(iv) When the demerit score of the establishment is more than forty, the Sanitary Permit shall be immediately suspended.

(4) The operator shall at the time of inspection correct a violation of a CRITICAL ITEM of these rules and regulations. Considering the nature of the potential hazard involved and the complexity of the corrective action needed, the DIRECTOR may agree to or specify a longer time frame, not to exceed 10 calendar days after the inspection, for the operator to correct violations of a CRITICAL ITEM.

(5) The operator shall correct noncritical violations by a date and time agreed to or specified by the DIRECTOR but no later than 30 calendar days after the inspection. The DIRECTOR may approve a compliance schedule that extends beyond this time limit if a written schedule of compliance is submitted by the operator and no health hazard exists or will result from allowing an extended schedule of compliance.

(e) Notwithstanding the grade criteria established above, whenever a second consecutive violation of the same item of 2, 4, or 6 demerit points is discovered, the permit may be suspended or in lieu thereof, the establishment shall be downgraded to the next lower grade.

(f) The operator shall ensure that he/she, or a designee, be present during inspections of a PUBLIC SWIMMING POOL by the DEPARTMENT.

(g) The Inspection Report and Letter Grade Placard shall be posted in a conspicuous area designated by the DIRECTOR or his/her representative.

§4642. Closure of Public Swimming Pool.

(a) Except as specified in (b) of this Section, an operator shall immediately discontinue operations and notify the DEPARTMENT if an IMMINENT HEALTH HAZARD may exist because of an emergency such as a fire, flood, extended interruption of electrical or water service, sewage backup, misuse of poisonous or toxic materials, gross insanitary occurrence or condition, or other circumstance that may endanger public health, such those listed in (d) of this Section.

(b) An operator need not discontinue operations in an area of a PUBLIC SWIMMING POOL that is unaffected by the IMMINENT HEALTH HAZARD.

(c) Failure to report an IMMINENT HEALTH HAZARD to the DEPARTMENT may result in immediate suspension of the Sanitary Permit.

(d) The DIRECTOR shall order immediate correction of the following violations, or immediate closure of the PUBLIC SWIMMING POOL whenever he finds any of the following conditions:

(1) Failure to continuously operate the PUBLIC SWIMMING POOL filtration or DISINFECTION equipment;

(2) Failure to provide adequate supervision and staffing as described in these rules and regulations;

(3) Failure to provide the minimum disinfectant residual levels;

(4) pH below 6.5 or above 8.0;

(5) Use of an unapproved or contaminated water supply source for potable water use;

(6) Unprotected overhead electrical wires within 20 feet horizontally of the PUBLIC SWIMMING POOL;

(7) Non-GFCI protected electrical receptacles within 20 feet of the inside wall of the PUBLIC SWIMMING POOL;

(8) Failure to maintain an emergency lighting source;

(9) Absence of all required lifesaving equipment on DECK;

(10) PUBLIC SWIMMING POOL bottom not visible;

(11) Total absence of or improper depth markings at a PUBLIC SWIMMING POOL;

(12) Plumbing CROSS-CONNECTIONS between the drinking water supply and PUBLIC SWIMMING POOL water or between sewage system and the PUBLIC SWIMMING POOL including filter backwash facilities;

(13) Failure to provide and maintain an ENCLOSURE or BARRIER to inhibit unauthorized access to the PUBLIC SWIMMING POOL when required;

(14) Use of unapproved chemicals or the application of chemicals by unapproved methods to the PUBLIC SWIMMING POOL water;

(15) Broken, unsecured, or missing main drain grate or any submerged suction outlet grate in the PUBLIC SWIMMING POOL;

(16) Number of BATHERS/PATRONS exceeds the THEORETICAL PEAK OCCUPANCY;

(17) Broken glass or sharp objects in PUBLIC SWIMMING POOL or on DECK area;

(18) Failure to possess a valid Sanitary Permit; or

(19) It is declared a "public nuisance" as defined in 10 GCA §20107.

(e) When the DIRECTOR orders closure of a PUBLIC SWIMMING POOL, he shall issue a written order to the PUBLIC SWIMMING POOL owner, operator, or his representative stating that the PUBLIC SWIMMING POOL is to be closed immediately and specifying corrective action(s) to be taken. The PERSON to whom the order is issued shall close the PUBLIC SWIMMING POOL immediately and shall prohibit any PERSON from using it. The DIRECTOR or his/her representative shall post a notice, easily visible to the public, stating that said POOL is closed by order of the DIRECTOR and that swimming is prohibited.

(f) After the initial written order to close the PUBLIC SWIMMING POOL is issued, and after the specified corrective action(s) has been taken, the owner, operator or his representative shall notify the DIRECTOR that the PUBLIC SWIMMING POOL is ready for re-inspection.

(g) If upon re-inspection the corrective action is not approved, the PUBLIC SWIMMING POOL shall remain closed and kept out of use until corrective action is approved.

(h) A PERSON shall not remove a notice of closure posted by the DIRECTOR or his/her representative, except with the express written consent of the DIRECTOR.

§4643. Variance.

(a) The DIRECTOR may, on written application and after review, grant a VARIANCE from a specific provision of these rules and regulations, subject to appropriate conditions which shall include a time schedule for compliance when such VARIANCE is in harmony with the general

purposes and intent of these rules and regulations, and when there are practical difficulties or unnecessary hardship in complying with such provision. The application shall include, but not be limited to:

(1) A citation of the section to which the VARIANCE is requested;

(2) A statement as to why the applicant is unable to comply with the section to which the VARIANCE is requested;

(3) The nature and duration of the VARIANCE requested;

(4) A statement of how the intent of these rules and regulations will be met and the reasons why the public health or SAFETY would not be jeopardized if the VARIANCE was granted; and

(5) A full description of any policies, procedures, or equipment that the applicant proposes to use to rectify any potential increase in health or SAFETY risks created by granting the VARIANCE.

(b) A VARIANCE request from an existing PUBLIC SWIMMING POOL that possessed a valid Sanitary Permit at the time of the effective date of these rules and regulations shall be approved by the DIRECTOR, provided no injuries or disease transmission have occurred in the existing PUBLIC SWIMMING POOL as a result of the deficiency or non-compliance, and the VARIANCE request:

(1) Is not for the requirements of §§4608-4615 and §§4634-4642; and

(2) Will not result in an IMMINENT HEALTH HAZARD.

(c) Any VARIANCE approved pursuant to (b) of this Section shall remain in effect indefinitely until:

(1) The Sanitary Permit of the existing PUBLIC SWIMMING POOL expires and not renewed within two years from the date of the expiration;

(2) The existing PUBLIC SWIMMING POOL undergoes SUBSTANTIAL ALTERATION; OR

(3) An injury or a disease transmission is documented as a result of the VARIANCE.

(d) The DIRECTOR, not his/her representative, is delegated the authority to approve such VARIANCE.

§4644. Exemption.

A PUBLIC SWIMMING POOL is exempt from the provisions relating to BARRIERS and ENCLOSURES under §4627 and §4630 when all of the following alternative SAFETY measures are in place:

(1) 24-hour manned security;

(2) monitored video surveillance of the entire perimeter of the facility; and

(3) signage posted in a conspicuous place communicating that unauthorized entry is prohibited.

§4645. Severability.

If any provision or the application of any provision of these rules and regulations is held invalid, that invalidity shall not affect other provisions or applications of these rules and regulations.

ECONOMIC IMPACT STATEMENT FOR THE PROPOSED RULES AND REGULATIONS FOR PUBLIC SWIMMING POOLS

RULES AND REGULATIONS FOR PUBLIC SWIMMING POOLS

ECONOMIC IMPACT STATEMENT

Title 5 Guam Code Annotated, Chapter 9, Article 3

DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES
DIVISION OF ENVIRONMENTAL HEALTH
123 Chalan Kareta
Mangilao, Guam 96913-6304
(671) 735-7221

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EXECUTIVE SUMMARY

The Division of Environmental Health (DEH) of the Department of Public Health and Social Services (DPHSS) is proposing to repeal and replace the existing *"Rules and Regulations for Public Swimming Pools"* with a revised and updated version with the same name. The proposal seeks to safeguard public health and provide a swimming environment that is conducive to good health and safety for the people of Guam. As defined in Title 10 GCA, Chapter 29, public swimming pool is "any swimming pool that is available for public use, whether for a fee or free of charge, or any swimming pool used by any business, partnership, corporation or person for the use of their customers, clients, guests or employees including, but not limited to: a commercial pool; a community pool or pool at a hotel, motel, resort, auto park, trailer park, apartment house, or other multiple rental unit; private club; public club; and public or private school, gymnasium, or health establishment."

The second edition of the Centers for Disease Control and Prevention's (CDC) Model Aquatic Health Code (MAHC) was used as a template in updating these regulations. The MAHC is a guidance document developed with regulators and swimming pool professionals reflecting the latest available scientific information and best practices in the industry. The primary goal of the proposed regulations is to prevent and reduce the number of injuries and illnesses in public swimming pools. In Fiscal Year 2018, there were a total of 107 public swimming pools and wading pools regulated by DEH. If adopted, the proposed regulations will govern the operation of these swimming pools and impact the health and safety of more than 200,000 local and tourist bathers on island.

To aid in the economic impact assessment of the proposed regulations, DEH analyzed available data from CDC, several national scientific reports, and survey results from affected local, regulated swimming pools. Both direct and indirect economic impacts are presented here. Direct costs include medical expenses incurred to treat or alleviate illnesses, while indirect costs are earnings loss by bathers who have to take time off from work due to illness, or by parents or guardians who have to take care of the sick child. The analysis represents DEH's best estimate of these economic impacts. Other possible impacts such as long-term health consequences, pain and suffering of sick bathers, time lost from work or school, and possible lawsuits are not quantified in this analysis but are equally important and should also be mentioned.

To determine the anticipated, direct economic impact the adoption of the proposed regulations may have on Guam swimming pools, a survey questionnaire was distributed to all 107 public swimming pools on island that would be affected by the proposed regulations. These include all community pools, resorts and waterparks, and pools at hotels, apartments, and condominiums. DEH attempted to conduct a census survey, but because not every swimming pool responded, a sample survey was done instead. The survey focused on the six provisions in the proposed regulations that were deemed by DEH to have the greatest economic impact: (1) barriers and enclosures; (2) diaper-changing stations; (3) chemical storage space; (4) qualified operator; (5) pool maintenance; and 6) coming into compliance. Seventy responses (65%) were received for this survey.

Analysis of the survey results relating to the cleaning, repair, and maintenance of swimming pools showed that the existing requirements in the proposed regulations have a direct financial impact of $1,583,000 on Guam public swimming pools annually. It should be emphasized that this cost is not a new or additional burden to the facilities as this is what they have been spending annually to comply with the existing requirements in the regulations, which have been in place for the past 38 years.

On the other hand, results of the survey associated with the proposed changes indicated that the adoption of the regulations will have a direct total financial impact of $7,923,775 to the swimming pools in the first two years of its implementation due to the one-time costs for the replacement or modification of structures and purchase of additional equipment. The projected cost, based on survey results:

- Barriers and enclosures (Projected one-time cost = $3,195,500)
- Diaper-changing stations (Projected one-time cost = $540,000)
- Chemical storage space (Projected one-time cost = $1,068,500)
- Qualified operator (Projected one-time cost = $17,775)
- Coming into compliance (Projected one-time cost = $3,102,000)

Existing, permitted facilities may apply for an exemption from some of the requirements, including the provision on barriers and enclosures. Thus, the actual financial impact may be much less than the cost estimated in the survey. In addition, the proposed regulations allow two years, from the date of its effectivity, for all existing public swimming pools to come into compliance with the new requirements; thus, the amount of $7,923,775 derived from the survey can be spread over a period of two years. This means that the annual cost of complying to the proposed requirements is about $3,961,888. If the costs are equally distributed to all the affected swimming pools, the economic impact to the industry is $101.44/day for the first two years. After the two-year implementation period, the cost to the industry will significantly be lower as only the cost to maintain the facilities will remain. While the increased costs that will result from the adoption of the proposed regulations may be deemed as an adverse impact to the affected establishments, the overall impact will be beneficial to the economy and the health of the population from the expected reduction in the number of injured or sick bathers on island and its associated economic burden.

One of the illnesses that the proposed regulations aim to prevent with the new provision on diaper-changing stations is cryptosporidiosis. This infection is caused by *Cryptosporidium*, an extremely chlorine-tolerant parasite that may proliferate more than seven days after a diarrheal event in an adequately chlorinated pool. Cryptosporidiosis has not been reported on Guam, and it's uncertain if the absence of any reported cases is due to lack of testing for such parasite on Guam, similar to many diarrheal complaints seen on the island. Regardless, potential of such infection is high as several studies have confirmed that it has worldwide incidence. According to CDC, about 22,000 pool-related infections are caused by *Cryptosporidium* in 2018 and the total medical and work loss costs for this type of infection is approximately $2,800 per person. If these figures are applied to the estimated number of bathers on Guam, the economic burden of cryptosporidiosis is about $2,976,400 annually. While the implementation of the proposed regulations is not expected to prevent all cryptosporidiosis in public swimming pools, it will decrease the risk for this type of gastrointestinal infection.

Drownings, both fatal and non-fatal, are unfortunate accidents in swimming pools that may be prevented by restricting access to certain pool areas from unsupervised children. By requiring fences and gates, and improving lifeguard bather surveillance, which are both included in the proposed regulations, incidences of drowning may be mitigated. A U.S. Consumer Product Safety Commission (CPSC) report revealed that approximately 7,300 people visited emergency room departments in 2017 due to non-fatal pool-related drowning. In Guam, local newspapers reported a drowning incident that happened in a hotel pool in August 2017 involving a toddler, which required her to be rushed to the hospital. The CDC's Web-based Injury Statistics Query and Reporting System estimates that the annual hospitalization cost for unintentional drowning is about $284,235 per case. If the annual non-fatal pool-related drowning incidence rate of about 0.01% is applied to the total number of bathers on Guam, approximately three non-fatal drownings can be attributed to swimming pools on island. This translates to an annual medical cost of about $852,705. The proposed regulations are not expected to prevent all drownings on public swimming pools, but a reduction may be achieved by implementing the provisions for barriers and enclosures.

Another public health concern that is addressed by some provisions in the proposed regulations is injury caused by inadequate storage and improper handling of pool chemicals. The proposed regulations require designated chemical storage space, pool operator training, and additional engineering controls to prevent accidental exposure of bathers and pool staff to chemicals. According to a CPSC report, the hospitalization cost for chemical burns was roughly $18,327 per case in the year 2000. If the CDC reported rate for number of people who required treatment due to pool chemical injuries, which is 1.6 per 100,000, is applied to the total number of bathers on Guam, it can be estimated that the cost of pool-related chemical injuries is about $65,308 annually.

Based on the above estimations, the combined annual medical cost of cryptosporidiosis, drowning, and chemical injury associated with swimming pools on Guam is approximately $3.9 million. It should be emphasized that this figure does not include long-term health consequences, possible civil lawsuits, and other indirect costs associated with these illnesses, which DEH expects to result in significant economic burden to the community. In addition, other notable diseases or injuries that may be acquired from public swimming pools are not quantified in this analysis, such as ear infections, pink eye, gastrointestinal infections caused by other types of pathogens, falls, and entrapment injuries. The annual medical savings from the decreased incidence of cryptosporidiosis, drowning, and chemical injury roughly equal the yearly implementation cost of the proposed regulations. However, after the two-year implementation period when alterations and modifications of facilities are already in place and only the cost of pool maintenance remains, the medical savings from the prevention of these three health events will greatly offset the compliance cost.

I. Purpose and Need

Pursuant to Title 10 GCA Chapter 21, a Sanitary Permit from the Division of Environmental Health (DEH) of the Department of Public Health and Social Services (DPHSS) is required for the lawful operation of certain businesses. The issuance of a Sanitary Permit enables DEH to regulate the applicable establishments to ensure that these facilities are sanitary and operate in such a manner as to protect the public from environmental hazards. Businesses possessing a Sanitary Permit are required to allow the access and inspection of its regulated facility by DEH. One type of regulated businesses is public swimming pools.

DEH conducts compliance inspections of public swimming pools to ensure these establishments operate in a manner, and possess the physical assets, to protect the health and safety of Guam's people. These regulatory inspections are conducted through the implementation of adopted rules and regulations that provide the sanitary operation and physical requirements, which establishments must comply with, such as:

- Design standards and construction
- Recirculation system
- Filter requirements
- Disinfection and water quality
- Hygiene facilities
- Electrical, lighting, and ventilation requirements
- Pool operation, cleaning, and maintenance
- Safety requirements
- Bather supervision

Currently, DEH imposes the "*Rules and Regulations for Public Swimming Pools*" for the regulatory control of public swimming pools. This document was adopted in 1980. DEH determined that there are some provisions in the existing regulations that need to be expanded and clarified to prevent recreational water illnesses and injuries to bathers on Guam.

Swimming is one of the favorite recreational activities in the U.S. partly due to its many health benefits. In fact, a National Sporting Goods Association survey revealed that swimming is the fourth most popular sports activity in 2009.[1] More than fifty million people, or about 18% of the population, reported to have swam more than six times that year,[2] resulting in about 301 million swimming instances. No local data was found to determine the number of swimming instances on Guam; however, presumably, this number may be a lot higher on island since swimming is a year-round activity as opposed to the mainland U.S. where it only peaks during the summer season. If the national rate of 18% is applied to the total local[3] and tourist population[4] on Guam, and assuming that these people swim at least three times a year, the number of swimming instances on island could easily be about 716,000.

Considering the number of times people swim in a year, it is easy to understand how likely they are to contract a disease or be exposed to chemical or physical injury when swimming in treated waters. A CDC report in May 2018 revealed that 27,219 people fell sick and eight died in the U.S. due to infectious disease outbreaks in treated recreational waters during 2000-2014.[5] Interestingly,

the same report determined that most of these outbreaks occurred in hotel swimming pools and hot tubs.

The leading cause of injury death in children less than four years of age is submersions, or drowning, and more than half of these cases occur in pools.[6] Non-fatal drownings, on the other hand, resulted in 7,300 emergency-department visits in 2017, according to the Consumer Product Safety Commission (CPSC).[7] The CPSC report also showed that two-thirds of non-fatal drownings among children ages one to four years occur in pools. Safeguards from drowning and entrapment, such as installation of fencing and gates, availability of approved safety equipment, and improved lifeguard surveillance are incorporated in the proposed regulations to minimize injuries to bathers, and prevent such debilitating and sometimes life-threatening events.

Pool chemicals are important in minimizing the risk for transmission of infectious pathogens among bathers. At the same time, these chemicals may also be cause of injury to patrons and pool staff if handled improperly. In 2012, CPSC's National Electronic Injury Surveillance System estimated that about 4,900 persons were treated in emergency room departments for pool chemical-related injuries.[8] Almost half of these patients were less than 18 years of age. In addition, there have been several reports of mass chlorine exposures in pools due to lack of education or training among pool operators, such as the 2015 incident in Antioch, California, where almost 40 children were rushed to the hospital for vomiting, coughing, and eye irritation.[9]

With the adoption of the "*Rules and Regulations for Public Swimming Pools,*" DPHSS seeks to prevent and reduce the risk of illness, drowning, and injury in Guam swimming pools. Many of these hazards are preventable and are addressed in the proposed regulations. For example, by updating the requirement for pool operator training, as provided in the proposed regulations, the spread of infectious diseases caused by poor maintenance of swimming pools and the risk for pool chemical-related injuries would be mitigated.

II. Financial Impact

A. Financial Impact of the Proposed Regulations

The most significant provisions that would likely have the greatest financial impact to public swimming pools are barriers and enclosures; diaper-changing station; chemical storage space; qualified operator; pool maintenance; and coming into compliance.

1. Existing regulations is silent in the requirement of barriers and enclosures in public swimming pools. In the proposed regulations, all swimming pools, chemical storage spaces, and mechanical spaces shall be enclosed to prevent unauthorized entry. As a result, pool facilities will need to provide any combination of building envelopes, site walls, fencing, and gates. To comply with this requirement, pool facilities may need to modify landscaping structures and erect walls and fences, which may come at a significant cost to them.

2. Although hygiene provisions are specified in the current regulations, no mention of the requirement for diaper-changing stations is made. The proposed regulations will

require at least one diaper-changing station be provided in each male and female restroom, which shall be located not greater than 200-feet walking distance from nearest entry/exit of swimming pools designed primarily for children less than five years of age. To meet this requirement, some pool facilities may need to purchase, repair, or install diaper-changing units in designated areas. These will cause additional expenses on the affected facility.

3. Current regulations state that chlorine and chlorinating equipment shall be in a separate room. The proposed regulations updated this provision by requiring at least one enclosed space dedicated to allow for safe storage of all chemicals, which shall be separate from the equipment room. The cost of compliance will most likely derive from the construction of these chemical storage spaces.

4. Existing regulations require that swimming pools be under the supervision of an operator who shall be responsible for the pool maintenance and safety of bathers. The proposed regulations seek to enhance this provision by requiring that qualified operators complete a pool operator training course that is recognized by DPHSS. This may result in some facilities having to hire a qualified operator or sending their employees to recognized training courses, which will be added expenditures to the facilities.

5. The proposed regulations contain provisions which require pool facilities to be kept clean and in good repair. Consequently, these facilities may need to purchase additional supplies, or repair existing structures or systems such as decks, electrical and filtration/recirculation systems, showers, toilets, or water heaters, which may result in additional costs.

6. Other provisions in the current regulations have been updated or revised. These include requiring swimming pools floors and walls to be white or light pastel in color; pool floors less than three-feet deep and pool stairs be slip-resistant; diving boards, stair treads, and handrails to conform to specific standards; pool depth markings be present and easily visible; at least two means of pool access and egress be provided; a continuous deck that provides at least four feet of clearance from pool edge to fence be available for lifeguard roaming and surveillance; telephone and safety devices be easily accessible to patrons; and adequate lighting (10-30 foot candle depending on the area) be provided for night swimming. Affected facilities may have to expend resources to modify, remove, or replace existing structures and equipment to come into compliance with the proposed regulations

To assess the direct financial impact the proposed regulations may have on the 107 swimming pools on island as a result of the adoption and implementation of the six provisions noted above, DPHSS attempted to conduct a census survey. However, not all swimming pools responded; sixty-five percent of the total permitted public swimming pools provided a response. Thus, a sample survey was conducted instead. This survey, which was prepared in the form of a questionnaire (**Appendix A**), asked the following twelve questions to public swimming pools currently possessing a Sanitary Permit with the Department:

Part I: Barriers and Enclosures

1. *The proposed Rules and Regulations for Public Swimming Pools (Section 4627) contain a provision which requires swimming pools to be enclosed by any combination of building envelope, walls, or fencing not less than six feet in height. In addition, gates or doors that form part of such enclosure shall be self-closing or self-latching to prevent unauthorized entry. Will your facility be able to comply with this requirement?*
2. *If "NO," and the Rules and Regulations for Public Swimming Pools are adopted, what is the anticipated cost your facility will incur in meeting this requirement?*

Part II: Diaper-Changing Station

3. *The proposed Rules and Regulations for Public Swimming Pools [Section 4625(b)] contain a provision which requires at least one diaper-changing station in each male and female restroom or a unisex diaper-changing station with an adjacent hand wash sink for swimming pools allowing use by diaper-aged bathers. Does your facility allow use by children less than five years of age?*
4. *If "YES," and the Rules and Regulations for Public Swimming Pools are adopted, what is the anticipated cost your facility will incur in meeting this requirement?*

Part III: Chemical Storage Space

5. *The proposed Rules and Regulations for Public Swimming Pools [Section 4607(r)] contain a provision which requires at least one space dedicated for chemical storage, which shall be separate from the equipment room. In addition, an emergency eye wash station shall be provided in all chemical storage spaces. Will your facility be able to comply with this requirement?*
6. *If "NO," and the Rules and Regulations for Public Swimming Pools are adopted, what is the anticipated cost your facility will incur in meeting this requirement?*

Part IV: Qualified Operator

7. *The proposed Rules and Regulations for Public Swimming Pools (Section 4634) contain a provision which requires a "qualified operator" to be present on-site or immediately available within two hours during all hours of operation at certain types of swimming pools. Such operator shall have passed an operator training course. Does your swimming pool fall under any of the following category?*
8. *Does your facility have an operator who completed a pool operator training program? (ex: Certified Pool Operator from the National Swimming Pool Foundation)*

Part V: Pool Maintenance

9. *The proposed Rules and Regulations for Public Swimming Pools (Sections 4607-4633 and 4635-4636) contain provisions which require swimming pool and associated structures/systems to be kept clean and in good repair. Does your facility expend resources for the cleaning, repair, and maintenance of the swimming pool and associated systems/structures, including decks, electrical distribution, filtration, lighting, plumbing, recirculation system, showers, toilets, and water heaters?*
10. *If "YES," what is the annual cost of the materials, supplies, equipment, and labor for maintaining your swimming pool systems and structures?*

Part VI: Coming into Compliance

11. *Not including the provisions mentioned above, there are a number of required parameters public swimming pools must meet according to the proposed Rules and Regulations for Public Swimming Pools. Some of these provisions require that swimming pools shall have floors and walls that are white or light pastel in color; pool floors less than three-feet deep and pool stairs shall be slip-resistant; diving boards, stair treads, and handrails shall conform to the standards specified in the proposed regulations; pool depth markings shall be present and easily visible; at least two means of pool access and egress shall be provided; a continuous deck that provides at least four feet of clearance from pool edge to fence shall be available for lifeguard roaming and surveillance; telephone and safety devices shall be easily accessible to patrons; and adequate lighting (10-30 foot candle depending on the area) shall be provided for night swimming. Does your facility have existing structure or equipment that requires modification, removal, or replacement to come into compliance with the proposed regulations?*
12. *If "YES," what is the total cost your facility will likely incur to ensure all requirements in the proposed regulations are met?*

The establishments were afforded two weeks to submit their completed survey; DPHSS received a total of 58 responses during that time period. Thereafter, twelve other establishments submitted a response up to May 2018. Not all of the respondents answered every question or followed the instructions given. Several hotels had more than one permitted swimming pool or wading pool and were instructed to complete a survey for each of these pools; however, most of the hotels turned in only one survey for their establishment. Graphical results of the survey are provided in **Appendix B**.

Part I. Barriers and Enclosures

- Forty-five respondents (64%) indicated that they will be able to comply with the proposed requirements.
  - One of the respondents who indicated that compliance was possible indicated that some resources would need to be expended to meet this requirement.
- Twenty-three respondents (33%) indicated that they will not be able to meet the proposed requirements.
  - When asked what the anticipated cost their facility may incur to comply with the requirements on barriers and enclosures, the respondents selected varying cost-range from $5,000 to up to $50,000.
- Two respondents (3%) did not provide an answer to this question.

Based on the results of the survey, 64% of the pool facilities will be able to comply with the barriers and enclosures provision. Twenty-three out of the 55 respondents indicated that they will need to incur expenses to effectuate this requirement. The associated cost would most likely result from building fences and gates to secure the perimeter of the pool and prevent unauthorized access by unsupervised children.

In determining the projected direct economic impact the pool facilities would sustain in the implementation of this particular provision, the anticipated cost (Question 2 of Part I) was multiplied by the number of affected facilities. This was determined by the number of respondents for each type of swimming pool and its corresponding percentage of the total number of surveyed

swimming pools. For the responses of "other," the median range was used in the calculation. As a result, the estimated compliance cost for this provision would be $3,195,500 based on the survey responses (Table 1).

Type of Swimming Pool	Respondents	No. of Swimming Pools	Financial Impact
Apartment/ Condominium	2 = (2/8) = 25% 1 = (1/8) = 12% 1= (1/8) = 12% 2 = (2/8) = 25% 2 = (2/8) = 25%	25% x 36 = 9.0 12% x 36 = 4.3 12% x 36 = 4.3 25% x 36 = 9.0 25% x 36 = 9.0	9.0 x $5,000 = $45,000 4.3 x $15,000 = $64,500 4.3 x $20,000 = $86,000 9.0 x $25,000 = $225,000 9.0 x $50,000 = $780,000
Community	0 = (0/0) = 0%	0% x 3 = 0	$0
Homeowners' Association	1 = (1/2) = 50% 1 = (1/2) = 50%	50% x 12 = 6.0 50% x 12 = 6.0	6.0 x $5,000 = $30,000 6.0 x $10,000 = $60,000
Hotel/Motel	2 = (2/14) = 14% 5 = (5/14) = 36% 1= (1/14) = 7% 1 = (1/14) = 7% 6 = (6/14) = 43%	14% x 47 = 6.6 36% x 47 = 16.9 7% x 47 = 3.3 7% x 47 = 3.3 43% x 47 = 20.2	6.6 x $10,000 = $66,000 16.9 x $15,000 = $253,500 3.3 x $20,000 = $66,000 3.3 x $25,000 = $82,500 20.2 x $60,000 = $1,212,000
Resort and Waterpark	0/2 = 0%	0% x 2 = 0	0
		TOTAL	**$3,195,500**

Table 1. Estimated financial impact to Guam's public swimming pools to implement the barriers and enclosures provision of the proposed *Rules and Regulations for Public Swimming Pools.*

Part II. Diaper-Changing Station

- Forty-five of the respondents (64%) indicated that their facility allow use by children less than five years of age.
  - All of the respondents said that it would cost them $5,000 and above to come into compliance with the requirement.
- Twenty-four respondents (34%) answered "no" to Question 1 of Part II.
  - Although they were instructed to skip Question 2 Part II if they answered "no" to the previous question, four of the respondents still indicated that they would incur expenses to comply with the provision.
- One respondent (1%) did not provide an answer to Question 1 of Part II.

The direct financial impact that will be borne by the pool facilities from this provision will derive from the repair or installation of diaper-changing stations. The cost among these establishments may differ depending on how many diaper-changing stations they need to meet the requirement. Additional costs may occur as a result of routine maintenance of diaper-changing stations. The indirect cost associated with coming into compliance with this proposed provision may occur through the time lost while installation or repairs are being made.

In determining the projected direct economic impact the facilities will sustain in the implementation of this provision, the highest end of each price range (Questions 2 of Part II) was multiplied by the number of affected swimming pools. This which was determined by the number of respondents for each range and its corresponding percentage to the total number of pool facilities. The cost is estimated to be $540,000 for diaper-changing stations (Table 2) based on the results of the survey.

Type of Swimming Pool	Respondents	No. of Swimming Pools	Financial Impact
Apartment/ Condominium	16 = (16/20) = 80% 1 = (1/20) = 5% 1 = (1/20) = 5% 2 = (2/20) = 10%	80% x 36 = 28.8 5% x 36 = 1.8 5% x 36 = 1.8 10% x 36 = 3.6	28.8 x $5,000 = $14,000 1.8 x $15,000 = $27,000 1.8 x $25,000 = $27,000 3.6 x $30,000 = $108,000
Community	0 = (0/0) = 0%	0% x 3 = 0	0 x $0 = 0
Homeowners' Association	6 = (6/10) = 60% 4 = (4/10) = 40%	60% x 12 = 7.2 40% x 12 = 4.8	7.2 x $5,000 = $36,000 4.8 x $10,000 = $48,000
Hotel/Motel	15 = (15/15) = 100%	100% x 47 = 47.0	47.0 x $5,000 = $235,000
Resort and Waterpark	1 = (1/1) = 100%	100% x 9 = 9.0	9 x $5,000 = $45,000
		TOTAL	**$540,000**

Table 2. Estimated financial impact to Guam's public swimming pools to implement the diaper-changing station provision of the proposed *Rules and Regulations for Public Swimming Pools.*

Part III. Chemical Storage Space

- Thirty-two of the 70 respondents (46%) revealed that they will not be able to comply with the proposed requirements.
  - The facilities that responded that they will not be able to comply with the provision further indicated that it would cost them $5,000 to $50,000 to meet this requirement.
  - One respondent said that it would cost them "other" amount not listed in the choices to effectuate the provision, but the respondent did not indicate a dollar amount.
- Thirty-five respondents (50%) answered "yes" to this question.
  - Three of the respondents stated that compliance would require the expenditure of resources.
- Three respondents did not provide an answer to Question 1 of Part III.

Based on the survey, half of the public swimming pools would be able to comply with the proposed requirement of a dedicated space for storage of chemicals, while the other half would not be able to comply. It has been a common observation by DEH officials during inspections that some facilities store their chemicals in the equipment room. If the proposal is adopted, the affected facilities may need to spend resources to build a suitable space for chemical storage that is separate from the equipment room.

In determining the projected direct economic impact the pool facilities will sustain in the implementation of this provision, the anticipated cost (Question 2 of Part III) was multiplied by the number of affected establishments. This was determined by the number of respondents for each range and its corresponding percentage of the total number of institutions. For the response of "other," the actual amount indicated was used in the calculation. As a result, it is estimated that the cost would be $1,068,500 based on the survey responses (Table 3).

Type of Swimming Pool	Respondents	No. of Swimming Pools	Financial Impact
Apartment/ Condominium	4 = (4/16) = 25% 11 = (11/16) = 69% 1 = (1/16) = 6%	25% x 36 = 9.0 69% x 36 = 24.8 6% x 36 = 2.2	9.0 x $5,000 = $45,000 24.8 x $10,000 = $248,000 2.2 x $50,000 = $110,000
Community	0 = (0/0) = 0%	0% x 3 = 0	0 x $0 = 0
Homeowners' Association	3 = (3/4) = 75% 1 = (1/4) = 25%	75% x 12 = 9.0 25% x 12 = 3.0	9.0 x $5,000 = $45,000 3.0 x $10,000 = $30,000
Hotel/Motel	4 = (4/13) = 31% 1 = (1/13) = 7.7% 6 = (6/13) = 46% 1 = (1/13) = 7.7% 1 = (1/13) = 7.7%	31% x 47 = 14.6 7.7% x 47 = 3.6 46% x 47 = 21.6 7.7% x 47 = 3.6 7.7% x 47 = 3.6	14.6 x $5,000 = $73,000 3.6 x $10,000 = $36,000 21.6 x $15,000 = $324,000 3.6 x $25,000 = $90,000 3.6 x $0 = $0
Resort and Waterpark	1 = (1/2) = 50% 1 = (1/2) = 50%	50% x 9 = 4.5 50% x 9 = 4.5	4.5 x $5,000 = $22,500 4.5 x $10,000 = $45,000
		TOTAL	**$1,068,500**

Table 3. Estimated financial impact to Guam's public swimming pools to implement the chemical storage space provision of the proposed *Rules and Regulations for Public Swimming Pools*.

Part IV. Qualified Operator

- Thirty-six respondents (51%) revealed that their facility does not fall under at least one of the six categories of swimming pools that would be required to hire a qualified operator based on the proposed regulations.
  - Five respondents that would not be required to get a qualified operator, based on their response to Question I of Part IV, still answered that they do not have a qualified operator.
- Twenty-six respondents (37%) said that they operate a swimming pool that would be required to have a qualified operator in accordance with the proposed regulations.
  - Sixteen respondents (62%) that would be required to have a qualified operator indicated that they do not have a qualified operator
  - Nine of these respondents (35%) revealed that they have a qualified operator.
  - One respondent whose swimming facility would require a qualified operator did not provide an answer to Question 2 of Part IV.
- Eight respondents (11%) did not provide an answer to Question I of Part IV.

Based on the results of the survey, about half of the public swimming pools would not fall under any of the categories that would require them to employ a qualified operator pursuant to the

proposed regulations. For those facilities that would be required, less than two-thirds would need to expend resources to effectuate this provision.

The proposed regulations would require a pool operator to possess a Certified Pool Operator (CPO) certification from the National Swimming Pool Foundation, or an equivalent credential determined by the Department. The cost of this training is currently $395 per applicant. Using this figure, DPHSS anticipates that the total financial impact of this provision to the industry is $17,775 (Table 4) based on the results of the survey.

Type of Swimming Pool	Respondents	No. of Swimming Pools	Financial Impact
Apartment/ Condominium	9 = (9/11) = 83%	82% x 3 = 30.0	30.0 x $395 = $11,850
Community	0 = (0/0) = 0%	0% x 3 = 0	0 x $0 = 0
Homeowners' Association	0 = (0/7) = 0%	0% x 12 = 0	0 x $395 = $0
Hotel/Motel	7 = (7/22) = 32%	32% x 47 =15.0	15.0 x $395 = $5,925
Resort and Waterpark	0 = (0/2) = 0%	0% x 9 = 0	0 x $395 = $0
		TOTAL	**$17,775**

Table 4. Estimated financial impact to Guam's public swimming pools to implement the qualified operator provision of the proposed *Rules and Regulations for Public Swimming Pools*.

Part V. Pool Maintenance

- Sixty-one respondents (87%) indicated that they expend resources for the cleaning, repair, and maintenance of the swimming pool systems and structures.
  - Fifty-eight respondents indicated that spend between $5,000 and $30,000 for the maintenance of their facility.
- Two respondents (3%) answered "no" to Question 1 of Part V.
- Seven respondents (10%) did not provide an answer to this question.

Using the results of the survey, DEH determined that most of the public swimming pools allocate resources for the maintenance of their facility on a yearly basis. The cost of pool maintenance, which is an existing requirement in the regulations, is not an added cost to the industry as the regulations have been in place for several decades.

Considering that the reported cost is a yearly expense and reflects all the public swimming pools, the direct financial impact of the existing requirements was calculated by multiplying the reported cost (Question 2 of Part V) by the number of affected swimming pools, which was determined by the number of respondents for each range and its corresponding percentage of the total number of facilities. As a result, it is estimated that the cost would be $1,583,000 based on the survey responses (Table 5).

Type of Swimming Pool	Respondents	No. of Swimming Pools	Financial Impact
Apartment/ Condominium	19 = (19/29) = 66% 3 = (3/29) = 10% 6 = (6/29) = 21% 1 = (1/29) = 3%	66% x 36 = 23.8 10% x 36 = 3.6 21% x 36 = 7.6 3% x 36 = 1.1	23.8 x $10,000 = $238,000 3.6 x $15,000 = $54,000 7.6 x $20,000 = $152,000 1.1 x $25,000 = $27,500
Community	0 = (0/0) = 0%	0% x 3 = 0	0 x $0 = 0
Homeowners' Association	1 = (1/11) = 9% 8= (8/11) = 73% 1 = (1/11) = 9% 1 = (1/11) = 9%	9% x 12 = 1.1 73% x 12 = 8.8 9% x 12 = 1.1 9% x 12 = 1.1	1.1 x $5,000 = $5,500 8.8 x $10,000 = $88,000 1.1 x $15,000 = $16,500 1.1 x $25,000 = $27,500
Hotel/Motel	1 = (1/17) = 5.9% 6 = (6/17) = 35% 2 = (2/17) = 12% 1 = (1/17) = 5.9% 1 = (1/17) = 5.9% 6 = (6/17) = 100%	5.9% x 47 = 2.8 35% x 47 = 16.5 12% x 47 = 5.6 5.9% x 47 = 2.8 5.9% x 47 = 2.8 35% x 47 = 16.5	2.8 x $5,000 = $14,000 16.5 x $10,000 = $165,000 5.6 x $15,000 = $84,000 2.8 x $20,000 = $56,000 2.8 x $25,000 = $70,000 16.5 x $30,000 = $495,000
Resort and Waterpark	1 = (1/1) = 100%	100% x 9 = 9.0	9 x $10,000 = $90,000
		TOTAL	**$1,583,000**

Table 5. Estimated financial impact to Guam's public swimming pools to implement the existing requirements of the proposed *Rules and Regulations 10for Public Swimming Pools*.

Part VI. Coming into Compliance

- Twenty-seven respondents (39%) indicated that they have existing structures or equipment that require modification, removal, or replacement to comply with the proposed regulations.
  - Twenty-five respondents who responded that they will not be able to comply with the existing requirements further indicated that they would need to expend between $5,000 and $100,000 to effectuate this provision.
  - Two respondents did not indicate how much it would cost them to come into compliance with the proposed regulations.
- Forty-one respondents (59%) answered "no" to Question 1 of Part VI.
- Two respondents (3%) did not provide an answer to this question.

Most of the swimming pool operators indicated that they would be able to comply with the other requirements in the proposed regulations based on the responses to the survey. For facilities that would need to incur expenses to meet the proposed requirements, DEH suspects that the cost would most likely result from the renovation of swimming pool facilities, such as repainting of depth markings, modification of landscape to allow for adequate lifeguard patron surveillance, installation of handrails, or construction of additional means of pool egress to meet the requirements.

The projected direct economic impact Guam's swimming pools will sustain in the implementation of this provision was determined by multiplying the anticipated cost (Question 2 of Part VI) with the number of affected facilities, which was determined by the number of respondents for each range and its corresponding percentage of the total number of public swimming pools. The median range was used in the calculation for the responses of "other" amount. As a result, it is estimated that the cost would be $3,102,000 (Table 6).

Type of Swimming Pool	Respondents	No. of Swimming Pools	Financial Impact
Apartment/ Condominium	3 = (3/10) = 30% 1 = (1/10) = 10% 1 = (1/10) = 10% 3 = (3/10) = 30% 2 = (2/10) = 20%	30% x 36 = 10.8 10% x 36 = 3.6 10% x 36 = 3.6 30% x 36 = 10.8 20% x 36 = 7.2	10.8 x $5,000 = $54,000 3.6 x $10,000 = $36,000 3.6 x $15,000 = $54,000 10.8 x $25,000 = $270,000 7.2 x $100,000 = $720,000
Community	0 = (0/0) = 0%	0% x 3 = 0	0 x $0 = 0
Homeowners' Association	1 = (1/1) = 100%	100% x 12 = 12.0	12.0 x $5,000 = $60,000
Hotel/Motel	3 = (3/13) = 23% 3 = (3/13) = 23% 1 = (1/13) = 7.7% 2 = (2/13) = 15% 4 = (4/13) = 31%	23% x 47 = 10.8 23% x 47 = 10.8 7.7% x 47 = 3.6 15% x 47 = 7.1 31% x 47 = 14.6	10.8 x $5,000 = $54,000 10.8 x $10,000 = $108,000 3.6 x $15,000 = $54,000 7.1 x $20,000 = $142,000 14.6 x $100,000 = $1,460,000
Resort and Waterpark	1 = (1/1) = 100%	100% x 9 = 9.0	9 x $10,000 = $90,000
		TOTAL	**$3,102,000**

Table 6. Estimated financial impact to Guam's public swimming pools to implement the other provisions of the proposed *Rules and Regulations for Public Swimming Pools*.

B. Total Financial Impact of the New Provisions

Among the five new provisions of the proposed *"Rules and Regulations for Public Swimming Pools"* evaluated in the survey, the barriers and enclosures provision appear likely to have the greatest financial impact to public swimming pools as 51% of the facilities will need to install fencing and gates. This was followed by the one-time cost of about $3,102,000 to comply with the other miscellaneous provisions and the one-time cost of about $1,068,500 to come into compliance with the chemical storage space provision. Complying with the diaper-changing station requirement will cost the swimming pools $540,000. Most swimming pools will be able to meet the proposed requirement for qualified operator; other facilities that do not have a qualified operator will need to expend about $17,775 to comply. Thus, this provision would have the least monetary impact.

The proposed regulations provide a two-year time frame from the date of its effectivity for all the existing swimming pool facilities to come into compliance with the provisions. This means that the total estimated direct financial impact of $7,923,775 is an expense that can be spread over a

two-year period for the affected swimming pools (Table 7). Furthermore, existing facilities with a valid Sanitary Permit from the Department prior to the adoption of the proposed regulations may apply for an exemption from some of the requirements, such as those relating to barriers and enclosure, pool surface and finish, and pool access and egress. If this cost is removed from the calculation, the actual financial impact to the industry may be significantly less than the anticipated cost.

Following the two-year transition period, and thereafter, the amount will be greatly reduced as the cost of installing the equipment or constructing the structures will no longer be applicable.

Total Direct Cost of Adopting the Rules and Regulations for Public Swimming Pools		
Requirement	Anticipated Cost	Comments
Barriers and Enclosures	$3,195,500	Barriers and enclosures, which may be constructed of any combination of building envelope, walls, or fencing not less than six feet in height would be required of public swimming pools to prevent unauthorized entry or break-ins. Furthermore, self-closing and self-latching gates or doors would need to be provided for unguarded swimming pool venues.
Diaper-Changing Stations	$540,000	The proposed regulations would require at least one diaper-changing station in each male and female restroom or a unisex diaper-changing station with an adjacent hand wash sink for swimming pools intended for use by diaper-aged children.
Chemical Storage Space	$1,068,500	Public swimming pools will be required to provide at least one space dedicated for the storage of chemicals, which shall be separate from the equipment room.
Qualified Operator	$17,775	Certain types of swimming pool will need to have a qualified pool operator on-site or immediately available within two hours during hours of operation. These facilities include those that have more than two swimming pools; have over 50,000 gallons of water; include features with recirculated water; used to provide swimming training; allow bather count of more than 200 bathers daily; and are operated by a municipality or school.
Coming into Compliance	$3,102,000	Additional provisions in the proposed regulations need to be met including swimming pool design and construction standards for pool depth markings; floors and walls, pool access and egress; lifeguard patron surveillance; and adequate lighting.
ANTICIPATED TOTAL DIRECT COST IN THE FIRST YEAR = $7,923,775		

Table 7. Financial impact of adopting the proposed *Rules and Regulations for Public Swimming Pools* based on the cost analyses of implementing the five new requirements that would likely have the greatest financial economic impact to the swimming pools.

C. Total Financial Impact of the Existing Provisions

The total direct financial impact to public swimming pools to comply with the existing requirements of the current regulations is $1,583,000 (Table 6), as estimated from the results of the survey. The provisions for cleaning, repair, and maintenance of public swimming pools have

been in existence since the adoption of the current regulations in 1980. Thus, this estimated cost is not an expense that is new to the establishments; instead, this is the approximated amount that the swimming pool operators have been spending on a yearly basis to maintain their facility.

Economic Burden of Recreational Water Illness, Drowning, and Injury

Swimming provides several desirable physical and health benefits, such as alleviating muscle and joint pain, reducing anxiety and depression, and fighting obesity. However, a swimming pool that is not properly maintained may harbor various hazards that could result in illness or injury to patrons and pool staff. The risk of exposure to these hazards is high, as people swim more than 301 million times each year in the U.S.[1] Drowning, gastrointestinal infections, as well as pool-chemical related injuries are some of the notable effects of hazards to bathers and pool staff that result in significant economic cost. The economic impact of other illnesses such as respiratory infections, skin rashes, and ear infections will not be discussed here but should be mentioned as they also bring about considerable economic costs to the community. The medical burden of these pool-related injuries and illnesses contribute to the indirect adverse impact to the island's economy that the proposed regulations aim to minimize.

As previously mentioned, there were 27,219 total infections associated with treated pool water reported by the CDC in 2018,[5] which is about 0.5% of the total yearly number of people who participate in swimming activity. CDC further reported that 89% of these infections were caused by the parasite *Cryptosporidium*. This chlorine-tolerant pathogen is commonly transmitted when swimmers ingest pool water that has been contaminated after a diarrheal event. No local cases of cryptosporidiosis have been reported on Guam; however, it is considered an emergent infection that is present worldwide and often undervalued due to limitations of appropriate diagnostic tools.[10] It usually causes long-lasting gastrointestinal illness and may even be life-threatening in immunocompromised individuals. The average medical and productivity costs of cryptosporidiosis was estimated to be about $2,800 per person based on a 1993 study conducted in Wisconsin.[11] Assuming that 239,000 locals and tourists swim each year on Guam, and 0.5% of these contract infections, about 1,063 people may become infected with cryptosporidiosis, which results to an estimated $2,976,400 yearly medical and productivity costs for this infection alone. Other common infections associated with public swimming pools and spas, such as those caused by *Legionella* and *Pseudomonas*, are difficult to quantify due to limited available data, but should be mentioned as they likewise result in significant economic burden to the community. By improving swimming pool operation and maintenance, and providing diaper-changing stations, as mandated by the proposed regulations, these infections may be minimized and the economic costs associated with them can be reduced.

Drowning is another public health event that may be associated with poorly maintained or operated swimming pools. The Consumer Product Safety Commission reported that there were about 7,300 pool- and spa-related emergency room visits in 2017, 73% of which involved children less than five years of age.[7] Drowning is associated with significant medical costs, especially if there are some brain or lung function damage involved. According to CDC's Web-based Injury Statistics Query and Reporting System (WISQARS), the average annual cost of hospitalization for unintentional drowning is $284,235.[12] No local data was found to estimate the number of pool-related drownings on Guam, which suggests that these incidents are likely underreported.

However, one drowning incident in a hotel pool was reported in 2017, where a toddler was later pronounced dead.[13]

Another pool-related health event that may impose economic burden to the community are those caused by improper handling and storage of chemicals. Burns, skin and respiratory irritations, as well as poisoning may all be caused by pool chemicals that are inadequately stored or inappropriately used. CDC reported that an estimated 4,876 persons required emergency room treatments for pool chemical injuries, which translates to a rate of 1.6 per 100,000 persons.[8] If this rate is applied to the total number of bathers on Guam, about four people may suffer from pool chemical-related injuries every year. The hospitalization cost for chemical burns in 2010 was $18,327, according a CPSC report.[14] This means that the annual economic burden of injuries caused by pool chemicals in Guam is about $73,308.

In total, the potential economic burden of pool-related infections, drowning, and chemical injuries in Guam is estimated to be about $3.9 million yearly. This potential economic burden can be offset by the implementation of the proposed *"Rules and Regulations for Public Swimming Pools"* if safeguards to protect the health and safety of bathers and pool staff are incorporated in the proposal. The proposed regulations require improvements in facility design, construction, and management, as well as pool operator training, which should reduce the number of pool-associated health events, and thus the economic burden.

III. Potential Increase or Decrease to Cost of Living or Price of Good or Service

The direct economic impact to public swimming pools from the adoption of the proposed *"Rules and Regulations for Public Swimming Pools"* is estimated to be $7,923,775 in the first two years of implementation, which equals to $3,086 a month per facility, and therefore, about $101 a day. After the two-year implementation period, the cost will significantly be reduced as only the cost for maintenance of the facilities will remain. Larger facilities may be able to readily absorb the increased cost without hardship. Even the smaller facilities should be able to handle the nominal cost increase since their actual expenses resulting from the adoption of the proposed regulations would be proportional to the size of their operation. The greatest cost impact of implementing the changes in the proposed regulations is the barriers and enclosures provision.

A reduction in the cost of living that may result from the adoption of the *"Rules and Regulations for Public Swimming Pools"* could be attributed to the decrease in the occurrence of injuries or the spread of infections caused by improved compliance inspections of these facilities. However, the confirmation of such consideration may require more thorough analysis.

IV. Direct or Indirect Impact on Employment

Adverse impact to employment is not expected if the proposed *"Rules and Regulations for Public Swimming Pools"* was to be adopted. The direct impact may occur from pool facilities needing to hire engineers, construction workers, pool operators, and additional staff to install, repair, manage, or maintain structures, fixtures, and pool systems. Indirect impact to employment could result from pools either increasing or decreasing hours of operation to make necessary changes.

V. Increase or Decrease in Cost of Business

Hotels and motels will be the primary entities that will experience increased cost of doing business from the adoption of the *"Rules and Regulations for Public Swimming Pools"* based on the results of the survey. The additional expenses they will bear will derive from the potential construction and repair of fences and gates, chemical storage spaces, and diaper-changing stations. Other expenses include the procurement of supplies, such as soap, paper towels, and pool chemicals. The expenses these facilities will incur will decrease after the two-year implementation period to come into compliance.

The implementation of the proposed regulations may also impact the swimming pools favorably from the prevention of possible litigation from parents and/or guardians who may seek to sue the facility from any illnesses or injuries that occur at their premises.

VI. Adverse or Beneficial Economic Impact

The adoption and implementation of the proposed *"Rules and Regulations for Public Swimming Pools"* will definitely have a financial impact on the establishments as swimming pools will be required to implement preventive measures in their operation and possibly install or replace one or more swimming pool structures. While these additional costs may be deemed as an adverse impact to the affected facility, the overall impact will be beneficial to the economy and the health of the population from the anticipated reduction in the number of injuries and illnesses in swimming pools and its associated economic burden. The vast majority of injuries and illnesses are both preventable and predictable, and increasing the level of prevention by implementing the proposed regulations will produce savings.

The anticipated reduction of illnesses and injuries in public swimming facilities, which is expected to occur from the implementation of the proposed *"Rules and Regulations for Public Swimming Pools"* should consequently reduce the economic burden these illnesses and injuries have on the island and its people. These cost benefits should outweigh the actual and imagined costs that the establishments may experience from the adoption of the proposed regulations. The anticipated annual implementation cost of the proposed regulations may be offset by medical savings from infections, drownings, and chemical injuries after two years of adoption.

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_____ _____
Name of Facility *Person Completing Survey (Print Name)*

Part I: Barriers and Enclosures

The proposed *Rules and Regulations for Public Swimming Pools* (Section 4627) contain a provision which requires swimming pools to be enclosed by any combination of building envelope, walls, or fencing not less than six feet in height. In addition, gates or doors that form part of such enclosure shall be self-closing or self-latching to prevent unauthorized entry.

§4627. All swimming pools, chemical storage spaces, and mechanical spaces shall be enclosed to prevent unauthorized entry. The enclosure may consist of any combination of building envelopes, site walls, or fencing and shall not be less than six feet in height measured from the finished grade to the top of the barrier on the side outside of the barrier surrounding the swimming pool. Chain-link fencing constructed of a maximum opening of 1 ¾ inches mesh shall be permitted. All primary public access gates or doors serving as part of a swimming pool enclosure or required swimming pool enclosure shall be self-closing and self-latching from any open position. All gates or doors shall be capable of being locked from the exterior and shall be at least equal in height at top and bottom to the barrier of which they are a component. Turnstiles shall not form a part of a swimming pool enclosure. For unguarded swimming pools, self-latching mechanisms must be located not less than four and a half feet above finished grade.

1. Will your facility be able to comply with this requirement?

   YES_____ NO_____ *(If you answered "YES," you do not need to complete the rest of Part I. Please go on to Part II. If "NO," please continue below.)*

2. If "NO," and the *Rules and Regulations for Public Swimming Pools* are adopted, what is the anticipated cost your facility will incur in meeting this requirement? *(Please mark one only.)*

   $1 - $5, 000_____ $5,001 - $10,000_____ $10,001 - $15,000 _____

   $15,001 - $20,000 _____ $20,001 - $25,000_____ Other (please enter amount) _____

   COMMENTS:

   _____

   _____

   _____

Part II: Diaper-Changing Station

The proposed *Rules and Regulations for Public Swimming Pools* [Section 4625(b)] contain a provision which requires at least one diaper-changing station in each male and female restroom or a unisex diaper-changing station with an adjacent hand wash sink for swimming pools allowing use by diaper-aged bathers.

§4625(b). All swimming pools allowing use by diaper-aged bathers (i.e., children less than five years of age) shall have at least one diaper changing station in each male and female hygiene facility or make available a unisex diaper changing station. Diaper changing units shall conform to the ASTM Standard F2285-04:

Part IV: Qualified Operator

The proposed *Rules and Regulations for Public Swimming Pools* (Section 4634) contain a provision which requires a "qualified operator" to be present on-site or immediately available within two hours during all hours of operation at certain types of swimming pools. Such operator shall have passed an operator training course.

> *§4634(a). Every public swimming pool shall be under the supervision of a qualified operator who shall assume the responsibility for compliance with all parts of these rules and regulations relating to pool operation and maintenance and safety of bathers. A qualified operator shall have completed an operator training course that is recognized by the department. Originals or copies of such course certificate or documentation shall be available on site for inspection by the health officer for each qualified operator employed at or contracted by the site.*

7. Does your swimming pool fall under any of the following category? *(Please mark all that applies.)*

   (a) has more than two swimming pools
   (b) has over 50,000 gallons of water
   (c) includes features with recirculated water
   (d) is used to provide swimming training
   (e) allows bather count of greater than 200 bathers daily
   (f) is operated by a municipality or school
   (g) none of the above

   [If you answered (g), you do not need to complete the rest of Part IV. Please go on to Part V. If you answered (a) to (f), please continue below.]

8. Does your facility have an operator who completed a pool operator training program? (ex: Certified Pool Operator from the National Swimming Pool Foundation)

   YES_____ NO_____

   COMMENTS:

   _____

   _____

   _____

Part V: Pool Maintenance

The proposed *Rules and Regulations for Public Swimming Pools* (Sections 4607-4633 and 4635-4636) contain provisions which require swimming pool and associated structures/systems to be kept clean and in good repair.

9. Does your facility expend resources for the cleaning, repair, and maintenance of the swimming pool and associated systems/structures, including decks, electrical distribution, filtration, lighting, plumbing, recirculation system, showers, toilets, and water heaters?

   YES_____ NO_____ *(If you answered "NO," you do not need to complete the rest of Part V. Please go on to Part VI. If "YES," please continue below.)*

10. If "YES," what is the annual cost of the materials, supplies, equipment, and labor for maintaining your swimming pool systems and structures? *(Please mark one only.)*

    $1 - $5, 000_____ $5,001 - $10,000_____ $10,001 - $15,000 _____

    $15,001 - $20,000 _____ $20,001 - $25,000_____ Other (please enter amount) _____

    COMMENTS:

    _____

    _____

    _____

Part VI: Coming into Compliance

Not including the provisions mentioned above, there are a number of required parameters public swimming pools must meet according to the proposed *Rules and Regulations for Public Swimming Pools*. Some of these provisions require that swimming pools shall have floors and walls that are white or light pastel in color; pool floors less than three-feet deep and pool stairs shall be slip-resistant; diving boards, stair treads, and handrails shall conform to the standards specified in the proposed regulations; pool depth markings shall be present and easily visible; at least two means of pool access and egress shall be provided; a continuous deck that provides at least four feet of clearance from pool edge to fence shall be available for lifeguard roaming and surveillance; telephone and safety devices shall be easily accessible to patrons; and adequate lighting (10-30 foot candle depending on the area) shall be provided for night swimming.

11. Does your facility have existing structure or equipment that requires modification, removal, or replacement to come into compliance with the proposed regulations?

    YES_____ NO_____ *(If you answered "NO," you do not need to complete the rest of Part VI. Please submit the completed survey to DEH. If "YES," please continue below.)*

12. If "YES," what is the total cost your facility will likely incur to ensure all requirements in the proposed regulations are met? *(Please mark one only.)*

    $1 - $5,000_____ $5,001 - $10,000_____ $10,001 - $15,000 _____

    $15,001 - $20,000 _____ $20,001 - $25,000_____ Other (please enter amount) _____

COMMENTS:

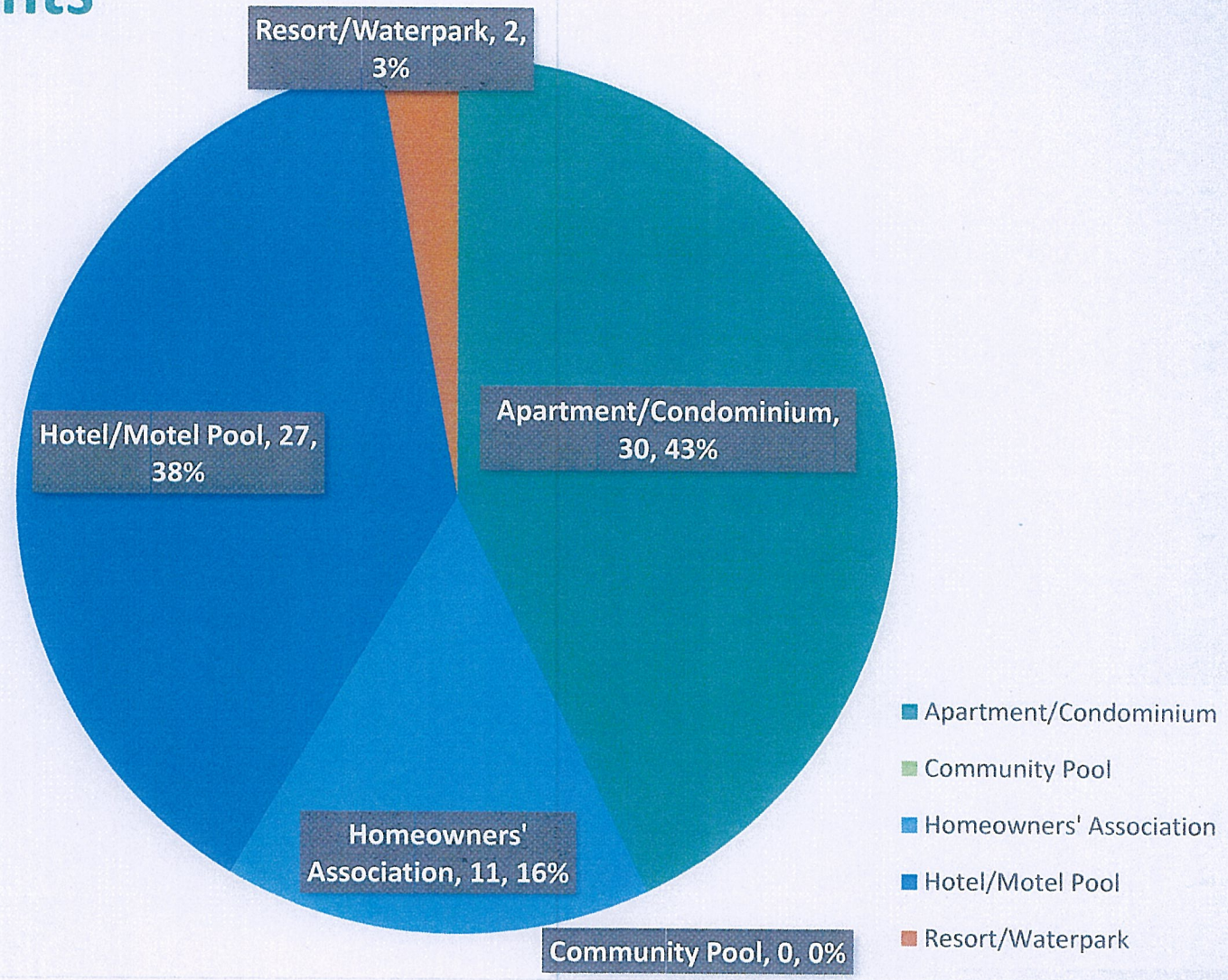
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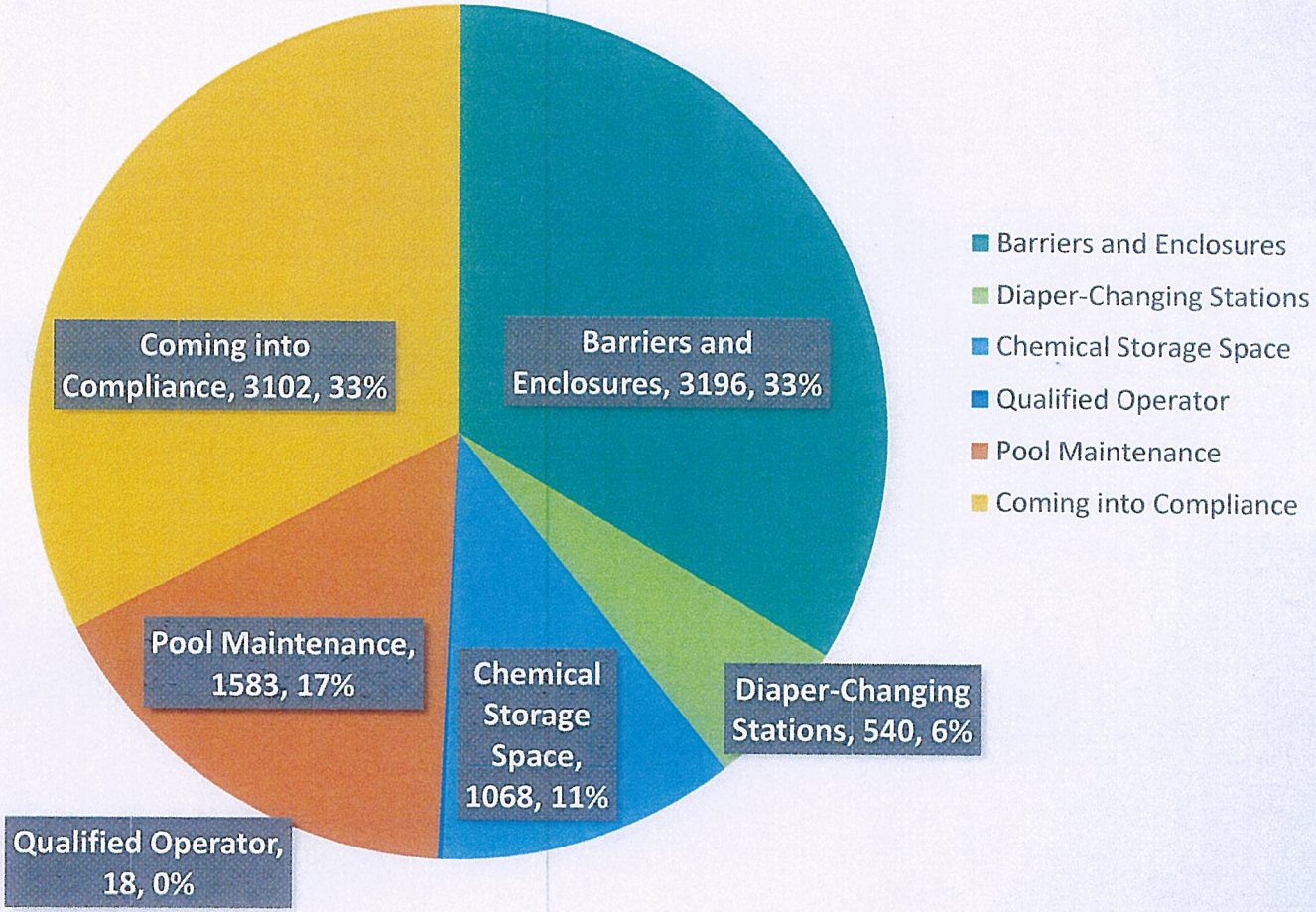
End of Survey
Please submit the completed form to DEH by Friday, April 20, 2018.
Thank you for your participation!

Respondents



Doc. No. 35GL-19-0269.

Total Estimated Financial Impact (in Thousand Dollars)



Department of Public Health and Social Services
Division of Environmental Health

Doc. No. 35GL-19-0269.

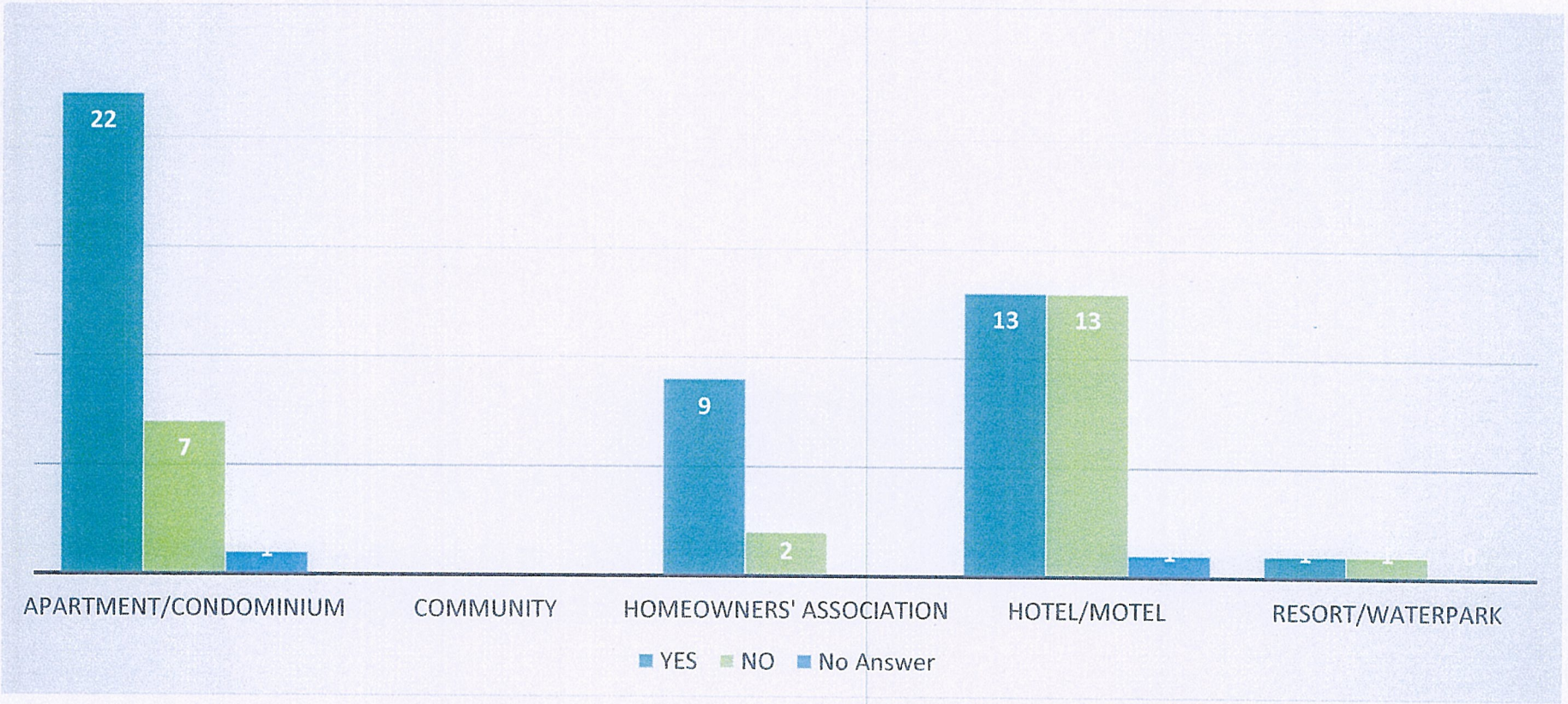
Breakdown of Swimming Pools

Type of Swimming Pool	No. of Swimming Pools Surveyed	No. of Swimming Pools Responded	% Responded
Apartment/Condominium	36	30	86%
Community	3	0	0%
Homeowners' Association	12	11	92%
Hotel/Motel	47	27	57%
Resort/Waterpark	9	2	22%
TOTAL	**107**	**70**	**65%**

Doc. No. 35GL-19-0269.

Part I. Barriers and Enclosures

Will your facility be able to comply with this requirement*?

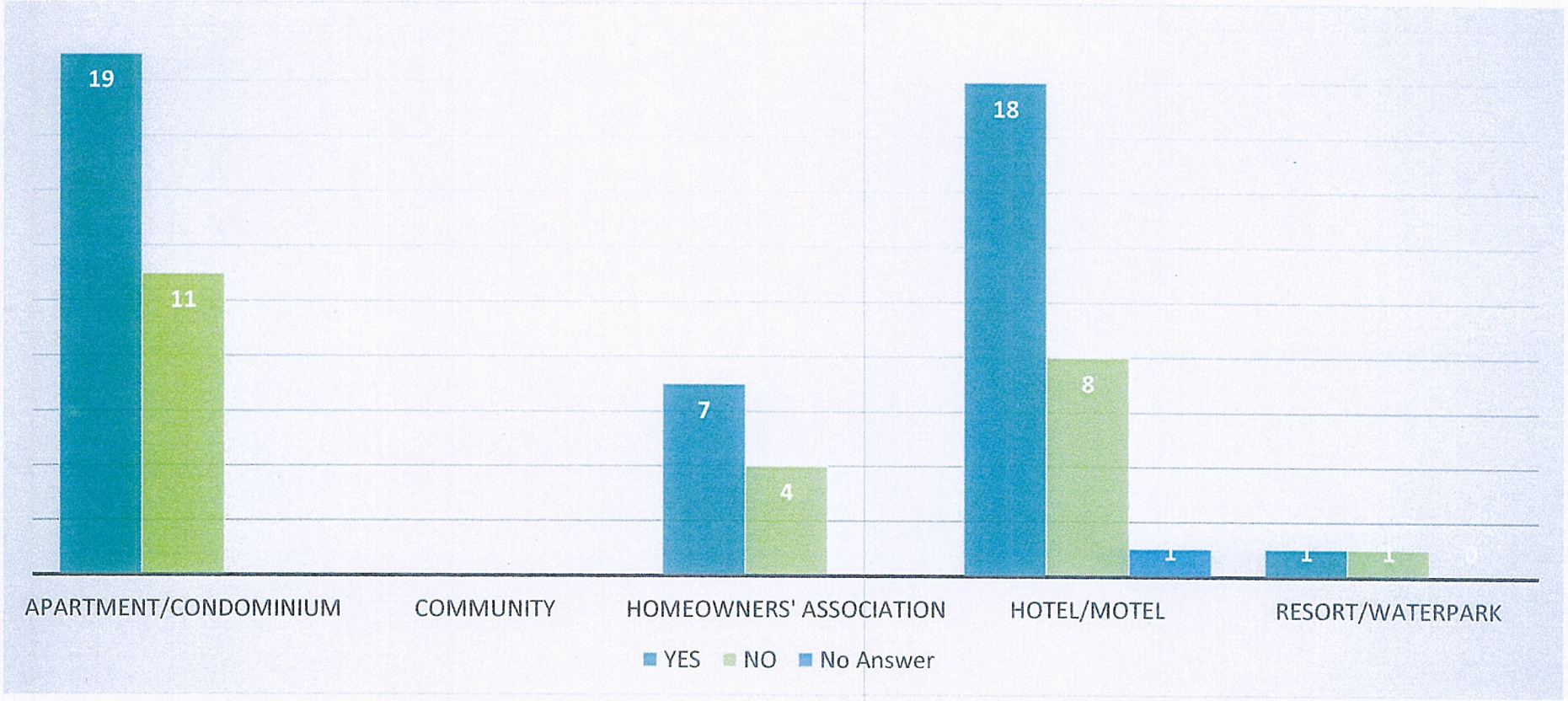


*The proposed *Rules and Regulations for Public Swimming Pools* (Section 4627) contain a provision which requires swimming pools to be enclosed by any combination of building envelope, walls, or fencing not less than six feet in height. In addition, gates or doors that form part of such enclosure shall be self-closing or self-latching to prevent unauthorized entry.

Doc. No. 35GL-19-0269.

Part II. Diaper-Changing Stations

Does your facility allow use by children less than five years of age?

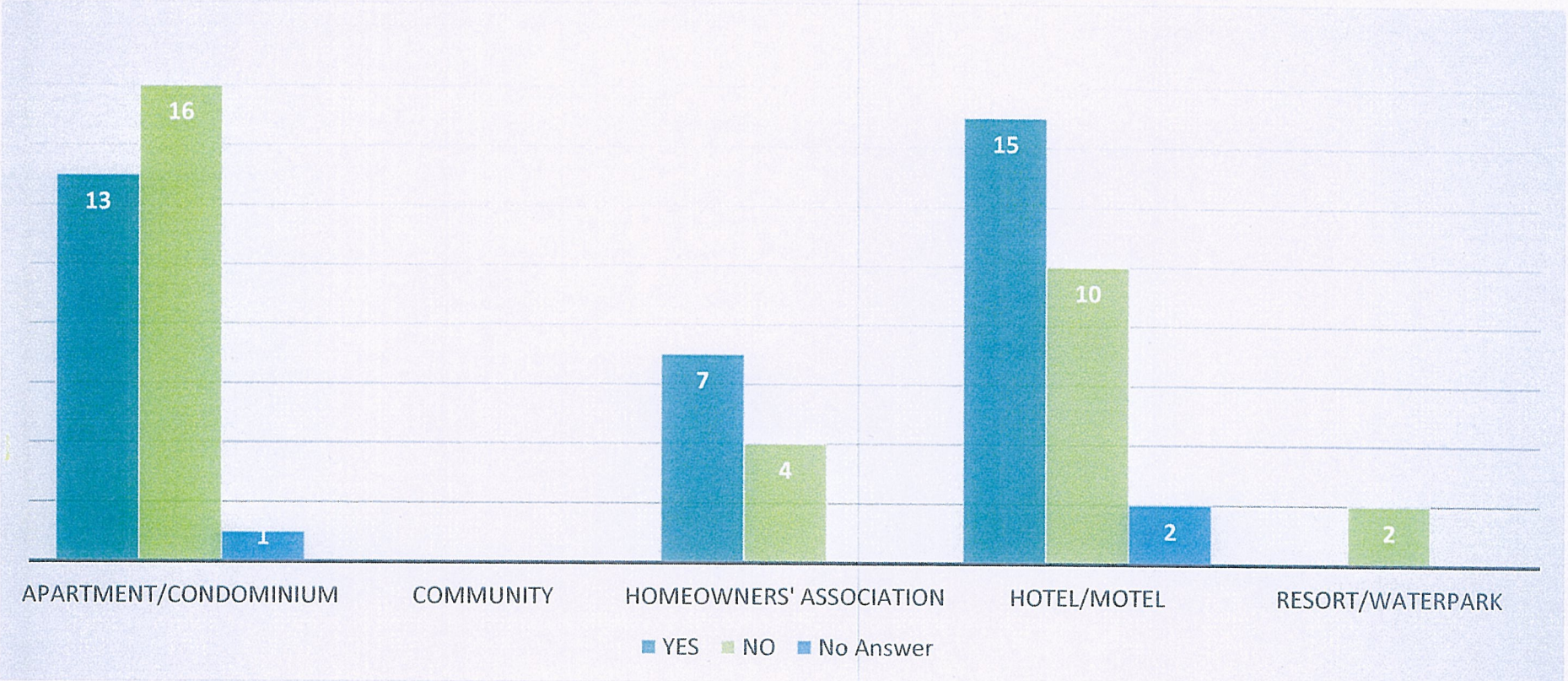


The proposed *Rules and Regulations for Public Swimming Pools* [Section 4625(b)] contain a provision which requires at least one diaper-changing station in each male and female restroom or a unisex diaper-changing station with an adjacent hand wash sink for swimming pools allowing use by diaper-aged bathers.

Doc. No. 35GL-19-0269.

Part III. Chemical Storage Space

Will your facility be able to comply with this requirement*?

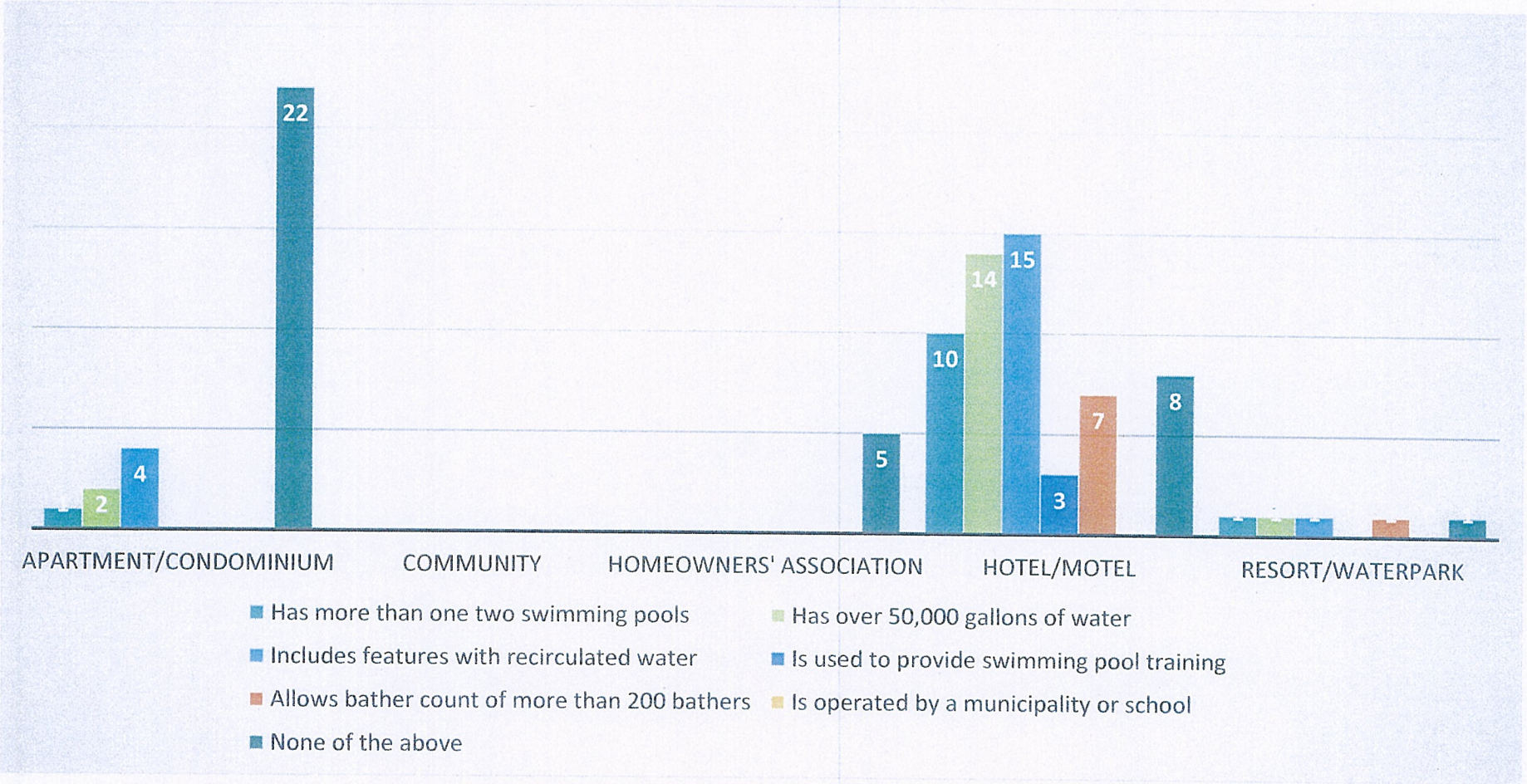


*The proposed *Rules and Regulations for Public Swimming Pools* [Section 4607(r)] contain a provision which requires at least one space dedicated for chemical storage, which shall be separate from the equipment room. In addition, an emergency eye wash station shall be provided in all chemical storage spaces.

Doc. No. 35GL-19-0269.

Part IV. Qualified Operator

Does your facility fall under any of the following category?

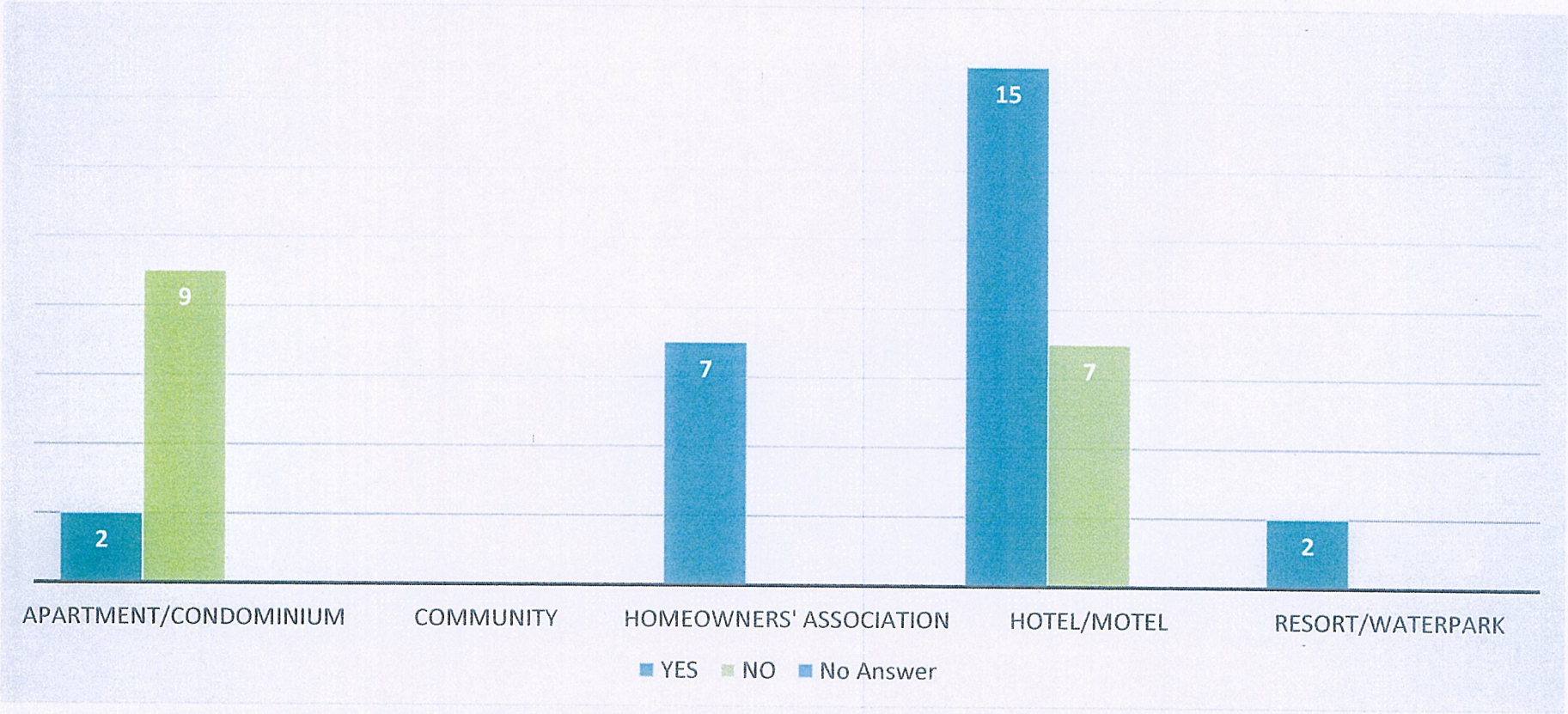


Note: Some facilities indicated that they fall under more than one of the listed categories.

Doc. No. 35GL-19-0269.

Part IV. Qualified Operator

Does your facility have an operator who completed a pool operator training program? (ex: Certified Pool Operator from the National Swimming Pool Foundation)

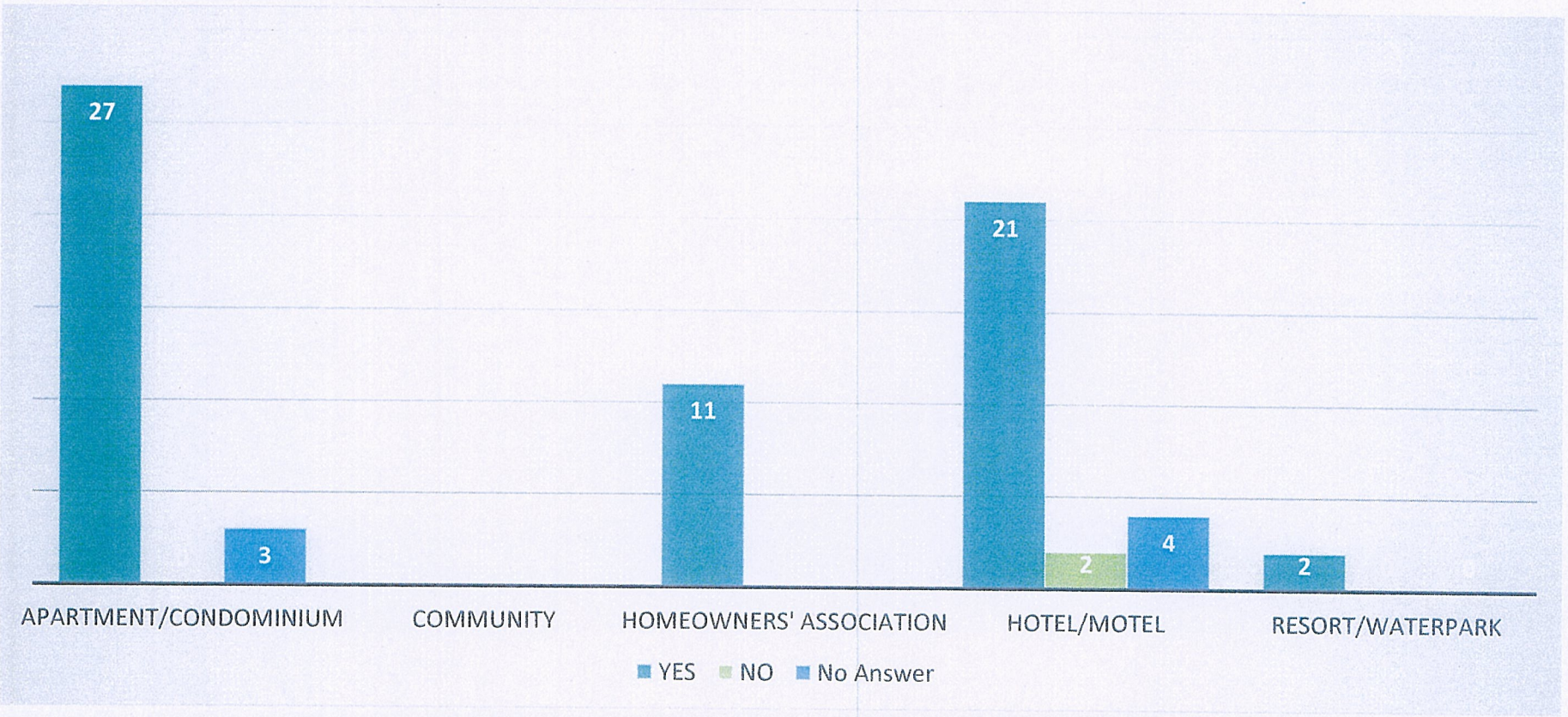


The proposed *Rules and Regulations for Public Swimming Pools* (Section 4634) contain a provision which requires a "qualified operator" to be present on-site or immediately available within two hours during all hours of operation at certain types of swimming pools. Such operator shall have passed an operator training course.

Doc. No. 35GL-19-0269.

Part V. Pool Maintenance

Does your facility expend resources for the cleaning, repair, and maintenance of the swimming pool and associated systems/structures, including decks, electrical distribution, filtration, lighting, plumbing, recirculation system, showers, toilets, and water heaters?

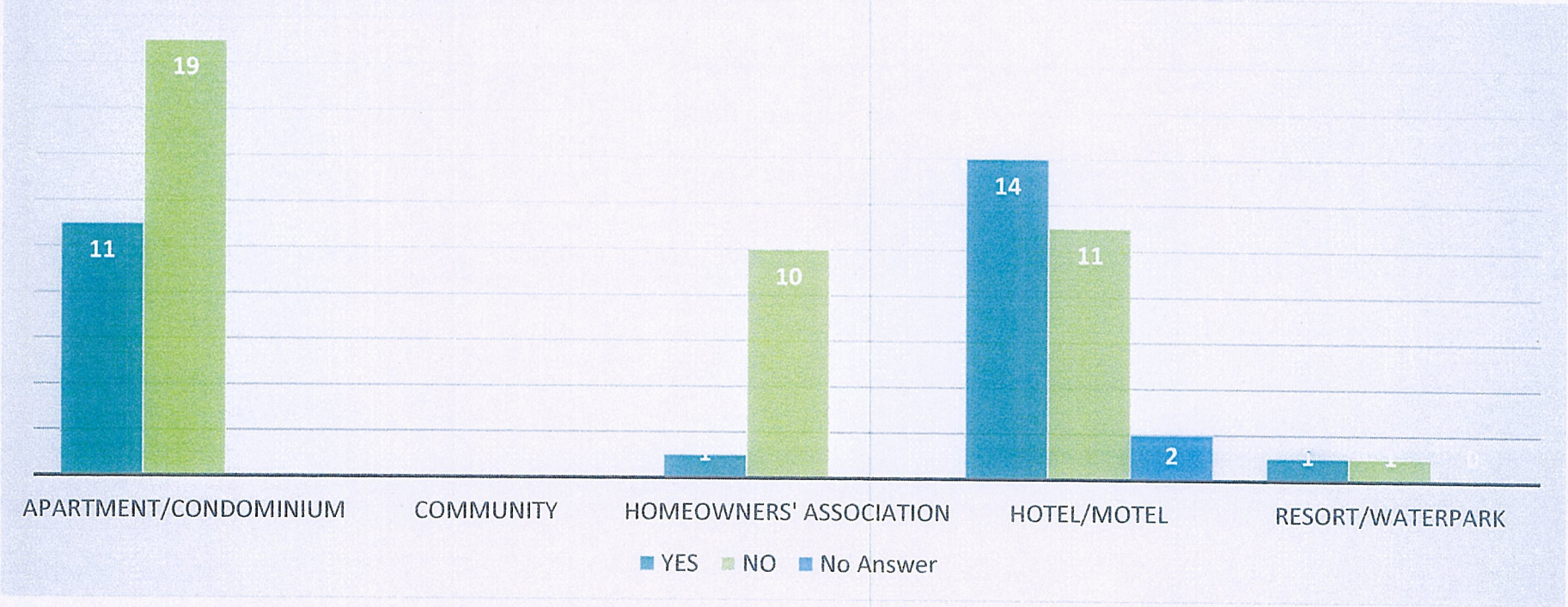


The proposed *Rules and Regulations for Public Swimming Pools* (Sections 4607-4633 and 4635-4636) contain provisions which require swimming pool and associated structures/systems to be kept clean and in good repair.

Doc. No. 35GL-19-0269.

Part VI. Coming into Compliance

*Does your facility have existing structure or equipment that requires modification, removal, or replacement to come into compliance with the proposed regulations?



*Not including the provisions mentioned above, there are a number of required parameters public swimming pools must meet according to the proposed *Rules and Regulations for Public Swimming Pools*. Some of these provisions require that swimming pools shall have floors and walls that are white or light pastel in color; pool floors less than three-feet deep and pool stairs shall be slip-resistant; diving boards, stair treads, and handrails shall conform to the standards specified in the proposed regulations; pool depth markings shall be present and easily visible; at least two means of pool access and egress shall be provided; a continuous deck that provides at least four feet of clearance from pool edge to fence shall be available for lifeguard roaming and surveillance; telephone and safety devices shall be easily accessible to patrons; and adequate lighting (10-30 foot candle depending on the area) shall be provided for night swimming.

Doc. No. 35GL-19-0269.

PUBLIC HEARING TRANSCRIBED ORAL TESTIMONIES

MINUTES OF PUBLIC HEARING
Proposed Rules and Regulations
For Public Swimming Pools
October 18, 2018 (3:00pm – 5:00pm)
Division of Senior Citizens, Conference Room
Castle Mall, Mangilao

Division of Environmental Health (DEH) Attendance	Tom Nadeau, Chief Environmental Public Health Officer (EPHO) Marilou Scroggs, EPHO Administrator Leilani Navarro, EPHO I	
TOPICS	**DEH**	**PUBLIC**
I. Opening Remarks	Marilou Scroggs (MS) started the Public Hearing by reading the following opening remarks: "Hafa Adai! It is now 3:00 PM, on October 18, 2018. My name is Marilou Scroggs; I am an Environmental Public Health Officer Administrator for the Bureau of Inspection and Enforcement of the Division of Environmental Health of the Department of Public Health and Social Services. On behalf of the Acting Director of this Department, Mr. Leo G. Casil, we welcome you all to this public hearing where we will be accepting and hearing comments to the proposed *Rules and Regulations for Public Swimming Pools*. With me today are Mr. Thomas Nadeau, Chief Environmental Public Health Officer of the Division of Environmental Health, and Ms. Leilani Navarro, Environmental Public Health Officer for the Bureau of Inspection and Enforcement. Title 10 GCA, Chapter 21 mandates the Division of Environmental Health, or DEH, to regulate the sanitary operation of public swimming pools. Section 29101(c) of Chapter 29 of the same code defines "public swimming pool" as, "any swimming pool that is available for public use, whether for a fee or free of charge, or any swimming pool used by any business, partnership, corporation or person for the use of their customers, clients, guests or employees including, but not limited to: a commercial pool; a community pool or pool at a hotel, motel, resort, auto park, trailer park, apartment house, or other multiple rental unit; private club; public club; and public or private school, gymnasium, or health establishment." To carry out the provisions of these mandates, Section 20105 of Title 10 GCA, Chapter 20 authorizes the Director of the Department of Public Health and	

	Social Services to adopt and promulgate rules and regulations, as necessary. The promulgation of rules and regulations is governed by the Administrative Adjudication Law (Title 5, Chapter 9, Guam Code Annotated), and Section 9301 of that law requires that at least 10 days before the public hearing, a notice must appear in a newspaper of general circulation in Guam announcing the date, time, and place of the public hearing. The Department did comply with that provision by publishing the announcement in *The Guam Daily Post* on September 30, 2018 and October 4, 2018. Copies of the proposed rules and regulations were also made available at the DEH office and on the Department website as required by law. As part of Administrative Adjudication Law procedures, an Economic Impact Statement was prepared. DEH estimates that the total economic impact of complying with the existing provisions and the new requirements in the proposed regulations would be about $9,506,775, as determined by a survey conducted by the Department. In regulating public swimming pools, DEH is mandated to issue Sanitary Permits to all qualifying public swimming pools. The standards required of swimming pools in the acquisition of such permit are outlined in the current *Rules and Regulations Relating to Public Swimming Pools* which was adopted in 1980. DEH has determined that the existing regulations are inadequate in protecting the health and safety of bathers on Guam. Thus, the Department seeks to update these rules and regulations by utilizing the minimum standards recommended by the Model Aquatic Health Code, or MAHC. The MAHC is a guidance document developed by the U.S. Centers for Disease Control and Prevention together with regulators, aquatics sector, and academia to reduce the incidence of recreational water illnesses, injuries, and drownings. Some of the most significant changes to the proposed regulations are: needing to provide barriers and enclosures around new and substantially altered pools; requirements for diaper changing stations for pools intended to be used by children less than five years of age; needing to provide a dedicated chemical storage space; and requirements for a qualified operator	

		in certain types of pools. The proposed regulations also detail how compliance inspections by DEH will be conducted. Based on the responses received in the economic impact survey and feedbacks obtained during stakeholder meeting, the Department is further proposing to exempt existing, permitted facilities from some of the existing and proposed requirements, such as those relating to pool surface and finish; pool access and egress; and barriers and enclosures. Thus, the actual economic impact of the proposed regulations will be significantly less than the amount indicated in the Economic Impact Statement, as most of the existing facilities would not need to expend resources to comply with these provisions. We will now formally accept any written or oral testimonies on the proposed rules and regulations. Dangkolo Na Si Yu'os Ma'ase!" Tom Nadeau (TN) asked the first attendee to come to the front so that he may be formally introduced for the record.	
II.	Oral or Written Testimonies	TN confirmed that the Division is still proposing to exempt existing facilities from the said provision.	Mr. Robert San Agustin moved to the front and introduced himself as the facilities manager for the Hilton Guam Resort and Spa. Mr. San Agustin said that in a previous meeting with hotel managers, there were a lot of concern about the proposed requirement regarding "barricades" or fencing around swimming pools. He said that the concern is not necessarily due to the cost of putting up the fences but rather on the aesthetics aspect. He wanted to ask if the plan is still in place to exempt existing facilities from this requirement. Mr. San Agustin then asked what kind of test kit the Division is planning to use to test pool water quality. He wanted to know if test strips, reagents, or liquids are going to be used because he wanted to make sure that their readings are going to

		be the same as the readings obtained by inspectors.
	Leilani Navarro (LN) thanked Mr. San Agustin for coming to the Public Hearing and providing his comments on the proposed regulations. She responded that language is provided in the proposed regulations for existing, permitted facilities to be exempted from the barriers and enclosures requirement. In response to the question on which test kit to be used, LN said that any test kit that is certified to NSF/ANSI 50 Standard is acceptable for use.	
		Mr. San Agustin then proceeded to comment on the provision for chemical storage space. He asked if a certain amount of chemicals (at least for use within the day) may be allowed to be kept in the pump room. He said that consumption of chemicals varies on a daily basis, depending on some factors, such as bather load and sunlight exposure. He stated that it would be difficult for them to go from one end of the property (where the chemical room is located) to the other end of the property where the pump room is. He mentioned that this increases the hazards of transporting the chemicals.
	LN responded by saying that she understands the concerns regarding difficulty or safety of transporting chemicals from one place to another, as well as the need for ease of access for chemicals when needed. She added that the provision for keeping chemicals away from the equipment room was a standard requirement in the Model Aquatic Health Code to prevent chemical injuries due to possible reaction with combustion-producing equipment in the pump room. However, she said that his comment was duly noted and that this will be discussed and evaluated by DEH. TN then asked Mr. San Agustin where their chemicals are currently being stored.	
		Mr. San Agustin said that they have two storage areas: one is the bulk storage room, which is away from the building, and the second one is the pump room, where they keep about two containers of chemicals.

	TN asked how big the chemical containers were that they kept in the pump room.	Mr. San Agustin answered that the containers are about five gallons or 50 pounds each.
	TN inquired what specific chemicals were kept in these containers.	Mr. San Agustin said they keep calcium hypochlorite, the chemical for "shocking" the pool, and cyanuric acid.
	TN stated that chemicals such as calcium hypochlorite are caustic, and thus, are prohibited in the pump room per the proposed regulations. LN added that chemicals stored with combustion-producing equipment pose a safety hazard.	Mr. San Agustin said that their chemicals are stored in a heater room, which is more like a refrigeration-type of equipment.
	TN asked for clarification on how much chemicals Mr. San Agustin is asking to store in the pump room.	Mr. San Agustin replied that a day's worth of chemicals be kept next to equipment.
	TN probed if a day's worth of chemicals is about 50 gallons.	Mr. San Agustin answered that it may be about 50 pounds of calcium hypochlorite. He added that they also keep about 5 gallons of cyanuric acid in another pump room.
	TN assured Mr. San Agustin that his comment will be taken into consideration during the review of the proposed regulations. He then asked what other chemicals are being kept in the pump room.	Mr. San Agustin responded that they have cyanuric acid, calcium hypochlorite, and bromine in the pump room. He mentioned that the EPA (Guam Environmental Protection Agency) allows them to store a maximum of two containers of chemicals in the pump room.

	MS inquired for how long does Guam EPA allow for the storage of such chemicals in the pump room.	
		Mr. San Agustin said he did not know the length of time EPA allows for this storage and he only heard it from one of the people who attended the training. He stated that it is impractical to keep only an hour's worth of chemicals as the demand changes depending on the weather and the number of swimmers.
	TN repeated that Mr. San Agustin's comment is acknowledged and it will be reviewed.	
	LN asked how far away is their chemical storage room from the pump room.	
		Mr. San Agustin answered that the chemical room is in their garage, which is about 300 feet from the pump room.
	TN asked Mr. San Agustin if he had any other comments or concerns with the proposed regulations.	
		Mr. San Agustin said that was all for now as he was not able to finish reviewing the whole document.
	TN stated that the Division will be accepting testimonies, preferably in writing, via email or hand delivery to the Department, up to 10 days after the public hearing.	
		Mr. San Agustin acknowledged TN's statement and said that he was finished with his testimony for the time being.
	TN then requested Ms. Mary Rhodes to sign in the attendance sheet.	
	LN invited Ms. Rhodes to take the front seat and state her name for the record.	
		Ms. Rhodes said that she is the president of the Guam Hotel and Restaurant Association (GHRA). She said that she came to the public hearing to show GHRA's support and cooperation with DPHSS. She further stated that they are currently in the process of compiling data from their members and their board is still reviewing their official response to

		the proposed regulations. She proceeded to say that she would be commenting on some of the key issues they have with the proposed regulations. Ms. Rhodes said that their engineering department has noticed that there are some things in the proposed regulations that are not being used in swimming pools anymore, such as chlorine gas, which she believed is now only being used by the Guam Waterworks Authority.
	TN responded that there are some jurisdictions that may still be using chlorine gas and that provision was included in the proposed regulations in the event that someone tries to introduce its use here on Guam.	
		Ms. Rhodes stated that GHRA felt that some of the sections in the proposed regulations fall under the purview of other agencies, such as EPA and OSHA (Occupational Safety and Health Administration). She said that they did not want DPHSS to overreach and have too many regulations that already exist in the books. Ms. Rhodes expressed that the following are the key issues that GHRA has with regards to the proposed regulations: 1. Barriers and enclosures – She said that the requirement for six feet high fence is not reasonable. GHRA wants to get an exemption from this requirement for all hotels so that its members do not have to fill out a variance form. She said that Hawaii exempts hotels from the barriers and enclosures requirement because they already have precautionary measures in place to prevent pool access. She said that aesthetics plays a huge part in attracting guests to Guam as an island resort destination, and a lot of money has been spent on the design, landscaping, and maintenance of the pool surroundings. GHRA feels that they have already spent a

		substantial amount of money for signage and surveillance to deter unauthorized access. In addition, Ms. Rhodes mentioned that the presence of barriers and enclosures limit visibility for parents and guests, and may also hinder entry of emergency personnel. 2. Lighting – GHRA feels that their members are good examples for other facilities to follow when it comes to coming into compliance with lighting and other requirements. GHRA is willing to reach out to other facilities to educate them and help them comply with pool maintenance requirements, similar to what GHRA has done with the Guam Food Code. 3. Diaper changing stations – A lot of the GHRA members already have diaper changing stations and most members are amenable to providing diaper changing stations even in the male restrooms. 4. Number and distance of showers – There are some concerns about the percentages of showers required and also the distance between the showers. GHRA thinks that requiring showers to be 50 feet apart is unreasonable. Its members already have showers, although these may not meet the number or distance requirement in the proposed regulations. 5. Compliance and enforcement – GHRA wants to find out if there is going to be enough funding and staffing to enforce the proposed regulations. GHRA has concerns about the enforcement of requirements such as showering after urination. Ms. Rhodes suggested that some of the language used can be simplified such that it is not so detailed.

	TN responded that DEH sometimes conducts inspections on weekends, as needed.	6. Chemical storage and maintenance – Hotels fluctuate chemical dosing according to the anticipated number of guests and other factors. Ms. Rhodes said that the most important thing is that hotels have a regular schedule of when they treat the water, and she further commented that manual dosing is more costly and inefficient. She stated that it is unreasonable to be very specific in the law when it comes to chemical dosing because dosing would depend on the number and frequency of guests that come in. She also wanted to find out the schedule of enforcement as she thought DEH only operates Mondays through Fridays. 7. Incident reporting – GHRA feels that it is unnecessary and would be difficult for their staff to report every incident. Ms. Rhodes said that this would create another layer of bureaucracy, and that it would increase their liability. She added that they already report incidents to GPD (Guam Police Department) and medical personnel, and that investigations need to be conducted first to determine the root cause of the incident. 8. Inspection and grading – GHRA is concerned about the grading system being subjective and unnecessary. Ms. Rhodes said that she is worried about the message and branding that the grading system will send to the tourists, considering that 60% of the GDP (Gross Domestic Product) on Guam comes from the tourism industry.

		Ms. Rhodes stated that is the gist of GHRA's issues with the proposed regulations.
	TN invited Ms. Rhodes to submit a written testimony so that DEH can respond to their issues line by line.	
		Ms. Rhodes asked if they would be given 10 calendar days or 10 business days to turn in their written testimony.
	TN responded that there is no set time specified in the AAL (Administrative Adjudication Law) on when to submit additional testimony after the public hearing. But per Department policy, they would be given 10 business days, similar to what is provided during legislative public hearing.	
		Ms. Rhodes acknowledged and said that they would submit their official written testimony within 10 business days.
	TN stated that he understood that GHRA is opposing the requirement on barriers and enclosures, and that the Department is currently proposing to make an exemption for all existing pools. He wanted to know if GHRA is seeking to exempt newly constructed swimming pools as well.	
		Ms. Rhodes answered that it is GHRA's position to request for an exemption for all hotels and resorts, regardless if it's existing or newly built, because they did not want this provision to hinder new investors from coming to the island. She said that tourism is the number one industry in Guam and they want it to further grow.
	TN reminded Ms. Rhodes of his request for a list of safety measures that GHRA members already have in place or proposes to use to prevent unauthorized pool access and drowning. He said that these measures may be included in the language of the regulations as a possible alternative to the barrier/fencing requirement.	
		Ms. Rhodes said that they will provide the list of alternative measures which she had previously mentioned, such as 24-hour security and after-hours signage.
	TN then asked for clarification about the concern on lighting. He asked if Ms. Rhodes was referring to color or intensity of light.	

		Ms. Rhodes replied that the regulations mention "about floors and walls that are light in color... in depths less than three feet." She added that most of the hotel pools are already compliant with this requirement, especially on the "lighter paint." She asked if this provision was only for new pools.
	TN responded that this is a requirement for both new and existing pools.	
		Ms. Rhodes commented that the regulations are very specific as to the number of lighting in the pool, which she feels is unreasonable.
	LN asked if Ms. Rhodes was talking about intensity of light or the color of pool floors and walls.	
		Ms. Rhodes answered, "All of it."
	TN commented that one of the criticisms that the Division encounters, especially with the old regulations, is that some of the language is vague. He added that one good example is "light in color." One person's interpretation of "light in color" may be different from the interpretation of another person. He said that this is the reason why DEH put specific standard, such as 10-foot candle for light intensity. He stated that this is done to promote consistency and uniformity, and prevent ambiguity and subjectivity. TN then asked for confirmation if there was any issue with the lighting provision, aside from it being very specific.	
		Ms. Rhodes said that GHRA was wondering why the provision was there considering that there is so much natural light in Guam.
	TN repeated that the language was put there to avoid ambiguity and vague interpretation. He added that if there is no detailed standard, then there really is no standard. He also said that lighting has rarely been an issue during compliance inspections conducted by the Division. TN then proceeded to ask about the next issue brought up by GHRA, which was regarding	

	diaper-changing stations. He said that diaper-changing station is not required per se in the male restroom. LN confirmed this and added that the minimum requirement is one unisex diaper-changing station.	
		Ms. Rhodes said that a lot the hotels already have this.
	TN moved on to the next issue, which was about the shower requirement. He asked whether GHRA's issue with the shower requirement is in terms of the ratio.	
		Ms. Rhodes replied that the language on when to take a full shower is too specific, and that to require the installation of showers every 50 feet is unreasonable.
	TN asked if there was any alternative that GHRA is offering in lieu of this.	
		Ms. Rhodes said that the whole section on showers need to be re-visited because she thought that it was odd and un-enforceable to ask bathers to shower after every urination. She said that the language has to be simplified so that it would not seem so weird.
	TN responded that the Division will look into this provision, but asked that GHRA submit a possible alternative proposal.	
		Ms. Rhodes offered to help in writing alternative language to simplify this section.
	TN welcomed Ms. Rhodes' offer and went on to address the issue about inspections. He said that DEH conducts inspections after-hours, on weekends, and sometimes during holidays. He added that, by law, DEH is compelled to conduct quarterly inspections of regulated facilities. Although DEH presently does not have the ability to do four inspections of every facility, every year, he said that the Division does its best to monitor and inspect pools at least once a year. He further stated that once these regulations are adopted, DEH will conduct pool inspections more frequently.	

	TN said that the issue on chemical storage was already brought up by Mr. San Agustin from Hilton and that DEH will review that provision. Next, TN commented on the issue about the existence of other laws that may be redundant to what DEH is seeking. He said that the Division tries to be consistent with other laws, but it is not always possible, and mentioned the "Every Child is Entitled to an Adequate Public Education Act" as an example. TN elaborated that this particular law requires classrooms to be no higher than 78^0F, which the Division believes is unreasonable, and consequently, it instead enforces the room temperature standard of ASHRAE. TN further added that DEH does not have authority over other agencies, and due to differing standards, the regulatee will need to comply with the more stringent law. In response to the issue on incident and illness reporting, TN mentioned that public health is seeking this requirement in the proposal to collect data that will drive policy-making, like syndromic surveillance for disease control. The pool data that DEH seeks will be used to justify the addition, or even the elimination of regulations or parts of regulations. TN also added that he was surprised to learn about the multiple unreported near-drowning incidents that occurred in Guam's hotel pools, which were mentioned at the recent GHRA general membership meeting that he had attended a few weeks ago. He said that DPHSS would want to know about these kinds of incidents to learn the cause, how it happened, etc. to prevent it from reoccurring. TN replied that DEH seeks to find the cause of the incident, and not necessarily who is at fault. TN commented that DEH regulates pools, and as such, it would want to know all hazards	Ms. Rhodes responded that GHRA sees potential liability to the involved hotel for preparing such document. Ms. Rhodes countered that, for sure, DPHSS will be on site to inspect, which may lead to unnecessary investigations. Ms. Rhodes also said that GMH (Guam Memorial Hospital) is not required to report all near-death scenarios.

	associated with the pool. He then added that DEH will review this issue, like the other comments that were submitted. TN addressed the issue on grading. He stated that DEH is mandated by law to implement a demerit/grading system, and such grading was added to the proposed regulations for convenience and quick access to the requirements because the current regulations does not have it. MS responded that DEH will create the demerit system once the regulations are finalized. TN said that DEH did not include the actual inspection report with the demerit system in the event further changes are necessary in the future. TN added that DEH will put a language in the proposed regulations that will indicate that violations will reflect the corresponding regulatory action; thus, the greater the violation, the greater the regulatory response. TN then thanked Ms. Rhodes for her comments. He reiterated that the Division will be accepting written testimony in the next 10 business days. The written testimonies will be reviewed, and the proposed regulations will be revised, as necessary, based on the comments received. After 10 days, DEH will submit the proposed regulations to the AG for legal review. Upon completion of the AG's review, it will be submitted to the Governor for review, and if approved, the Governor will transmit the proposal to the Legislature. Then the Legislature has 90 days to decide on what action to pursue – either accept it as is, have another public hearing, or revise it. If no action is taken by the Legislature after the 90 days, then it is adopted. TN added that as a courtesy, the Division will provide GHRA a copy of the final packet that will be transmitted to the Governor.	Ms. Rhodes commented that DEH is adding another layer to what it is currently mandated to do. She said that the statute is only referring to a demerit system, and not a grading system. Ms. Rhodes also said that she would like to see how the proposed demerit system would look like.

	As there were no further comments from the public, LN paused the recording at 4:17 pm and indicated that recording will resume if new attendees or speakers arrive.	Ms. Rhodes said that she appreciated the additional time to submit written testimony, and repeated that she would like to work with DPHSS on these regulations. Mr. San Agustin stated that Hilton will submit their comments to GHRA so that they can be combined into one written testimony.
III. Closing	LN officially closed the Public Hearing on the Rules and Regulations for Public Swimming Pools at 5:00pm, on October 18, 2018.	

SUMMARY OF REVISIONS MADE TO THE PROPOSED REGULATIONS AFTER THE PUBLIC HEARING

Summary of Revisions
Proposed Rules and Regulations for Public Swimming Pools

#	Topic	Public Comment	Revised Language
1	**Chemical Storage Space**	Pool chemical use fluctuates depending on factors such as sunlight and bather load. The public asked to allow them to store a day's worth of chemical in the pump room for easy access.	**§4607(s).** It shall be the responsibility of the Sanitary Permit holder of the public swimming pool to comply with all applicable codes (i.e., standards of Guam Fire Department and Guam Environmental Protection Agency) when storing chemicals necessary for maintenance purposes, operation, or sanitation of equipment in the EQUIPMENT ROOM.
2	**Supervision of Bathers**	The language used regarding showering is very detailed and hard to enforce.	**§4638.** POOL staff should encourage the following personal conduct regulations:
3	**Barriers and Enclosures**	The 6-foot fence requirement is unreasonable and destroys the aesthetics of the hotel.	**§4644.** A PUBLIC SWIMMING POOL is exempt from the provisions relating to BARRIERS and ENCLOSURES under §4627 and §4630 when all of the following alternative safety measures are in place: (1) 24-hour manned security; (2) monitored video surveillance of the entire perimeter of the facility; and (3) signage posted in a conspicuous place communicating that unauthorized entry is prohibited.
4	**Inspection and Grading**	The public wanted to see how the proposed demerit system would look like.	**§4641(d).** (1) The operator shall at the time of inspection correct a violation of a CRITICAL ITEM of these rules and regulations. Considering the nature of the potential hazard involved and the complexity

			of the corrective action needed, the DIRECTOR may agree to or specify a longer time frame, not to exceed 10 calendar days after the inspection, for the operator to correct violations of a CRITICAL ITEM. (2) The operator shall correct noncritical violations by a date and time agreed to or specified by the DIRECTOR but no later than 30 calendar days after the inspection. The DIRECTOR may approve a compliance schedule that extends beyond this time limit if a written schedule of compliance is submitted by the operator and no health hazard exists or will result from allowing an extended schedule of compliance.

Guam Law Library, 141 San Ramon Rd., Hagåtña, Guam 96910-5174
Telephone: (671) 477-7623 and 472-8062 Facsimile: (671) 472-1246

F. PHILIP CARBULLIDO
Chief Justice

GERALDINE AMPARO CEPEDA
Compiler of Laws

GUIDANCE FOR FORMATTING RULES AND REGULATIONS (GAR)

The Office of the Compiler of Laws is statutorily mandated to "[u]ndertake the publication of the continuing Administrative Rules and Regulations" of Guam. 1 GCA § 1602(c). The authority for the rule-making procedures of government of Guam agencies, departments, and other entities are set forth in Title 5, Guam Code Annotated, Chapter 9, Article 3, entitled "Rule-making Procedures." As part of this process, the rules are statutorily required to be "in a form approved by the Compiler of Laws." 5 GCA § 9303(a).

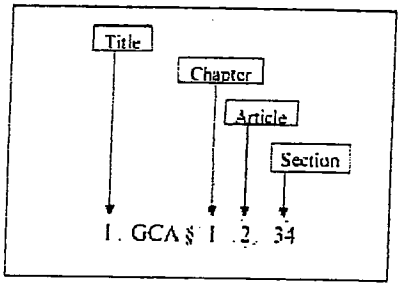
To assist government of Guam agencies, departments, and other entities, with the process of publishing submissions for including in the Guam Administrative Rules & Regulations (GAR), the Office of the Compiler of Laws has prepared this document to give guidance in the drafting process. It is strongly encouraged that those responsible for drafting rules and regulations review the recommendations and utilize the standard format herein, which was approved by the Guam Code Advisory Commission on June 21, 2005. Compliance with the recommended format will be de facto indication that that the submission is in a format approved by the Compiler of Laws.

Recommendation 1

Please compose GAR sections according to the diagram below. It is helpful to know that the GAR is divided into the following subdivisions in descending order:

Title (mandatory)
Division (if necessary)
Part (if necessary)
Chapter (mandatory)
Article (if necessary)
Section (mandatory)
Subsection (if necessary)

Note that Title, Chapter and Section designations are required for any codification scheme. Division, Part and Article designations are sometimes not used in particular codification schemes. We recommend that whenever possible, Article designations be used. The following diagram shows an example of the general codification scheme for the GCA, which similarly applies to the GAR:



Recommendation 2

Please draft GAR sections according the example below and identify subsections in the following format.

§ 1101. Name or Title of Section.

In the section title, the first letter of each major word is capitalized. Do not capitalize minor words such as conjunctions and articles (e.g. and, but, or, the, a, etc.). The text of the section should be written as shown in this example.

(a) First subsection. The first subsection (if any) is designated with small letters in parentheses.

(1) Second subsection. The second subsection (if any) is designated by Arabic numerals in parentheses.

(A) Third subsection. The third subsection (if any) is designated by large capital letters in parentheses.

(i) Fourth subsection. The fourth subsection (if any) is designated by small Roman numerals in parentheses.

(aa) Fifth subsection. If necessary, a fifth subsection is designated by double lower case letters in parentheses and the cycle repeats as follows.

(1) Sixth subsection.

(AA) Seventh subsection.

(i) Eighth subsection.

Recommendation 3

Please use Microsoft Word for creating new legislative documents. The Compiler's Office now uses Microsoft Word exclusively for processing the GAR. Legal publishers such as Lexis and West require transmittal of Word files. Use of MS Word will minimize glitches and errors caused by conversions of files created with other word processing software such as WordPerfect.

Recommendation 4
Please use Times New Roman font in documents. Times New Roman seems to be used universally and is a true-type font necessary for embedding in documents to be published. We use this font exclusively in all GAR documents.

Recommendation 5
When assigning a code section number to a new statutory addition and you are unsure of whether the desired code section number is vacant and available, please call our office.

Thank you for considering these recommendations. Please note that the suggestions herein are not necessarily hard and fast rules. There may be occasions requiring deviation from any standard formatting scheme. If you have any questions or comments, please do not hesitate to call my office.

GERALDINE A. CEPEDA

Office of the Attorney General of Guam

590 S. Marine Corps Drive, Suite 901 ♦ Tamuning, GU 96911
Phone 671.475.3324 extension 5015 ♦ **Fax** 671.477-4703 ♦ **Email** law@guamag.org

Hon. Leevin Taitano Camacho
Attorney General of Guam

February 11, 2019

Linda Unpingco DeNorcey
Acting Director
Department of Public Health and Social Services
123 Chalan Kareta
Mangilao, Guam 96913-6304

FEB 14 2019

Subject: Attorney General Approval of Proposed Rules and Regulations for Public Swimming Pools (Ref: DPHSS 19-0030)

Dear Acting Director DeNorcey:

The Office of the Attorney General has completed its review of the enclosed proposed Rules and Regulations for Public Swimming Pools, which were received in this office on January 23, 2019.

Pursuant to the Administrative Adjudication Law (AAL), 5 GCA § 9303, I am approving the proposed Rules as to form, constitutionality, compliance with the applicable requirements of the AAL, and compliance with your agency's statutory authority to promulgate rules.

We construe this transcript requirement to mean a word for word transcription of the proceedings as might be prepared by a court-related proceedings. However, after carefully reviewing the Department's very professional and thorough submission for both content, we have decided that the included narration of testimony presented at the public hearing is substantially compliant with the transcript requirement of the Administration Adjudication Law's Rule-Making Procedures. We will accept the proposed rules and regulations for this submission, but request compliance with the AAL in future submissions.

If you have any questions, please contact Deputy Attorney General of the Solicitor Division Karl P. Espaldon at (671) 475-3324, extension 3115.

Sincerely,

LEEVIN TAITANO CAMACHO
Attorney General

Enclosure

RECEIVED
Director's Office
Division of General Administration
FEB 13 2019
DPH&SS
Time: 3:58 Locator #: INC19-102

To	Initial	Date
TCM		
File		

RECEIVED
FEB 14 2019
DIVISION OF ENVIRONMENTAL HEALTH

UFISINAN I MAGA'HÅGA
OFFICE OF THE GOVERNOR

RECEIVED
DPHSS 3/14/19

LOURDES A. LEON GUERRERO
MAGA'HÅGA • GOVERNOR

JOSHUA F. TENORIO
SIGUNDO MAGA'LÅHI • LIEUTENANT GOVERNOR

March 12, 2019

VIA CENTRAL FILES / E-MAIL (linda.denorcey@guam.gov)

Linda Unpingco DeNorcey, MPH
Director
Department of Public Health and Social Services
123 Chalan Kareta
Mangilao, Guam 96913

RE: Proposed Adoption of the Rules and Regulations for Public Swimming Pools

Dear Director DeNorcey:

Thank you for submitting the proposed Rules and Regulations for Public Swimming Pools ("proposed Rules"). It is clear on review of the documents that the Department of Public Health and Social Services ("DPHSS") considered its duties carefully and diligently with regard to ensuring that our community's public swimming pools are sanitary and safe for our residents.

While I note that the Office of the Attorney General drew your attention to a technical flaw in compliance with the provisions of the Administrative Adjudication Law, it is clear from that office's decision to nonetheless approve the proposed Rules that DPHSS's work was well-received.

Pursuant to my authority under 5 G.C.A. §9303(a)(4), I approve the proposed Rules and Regulations for Public Swimming Pools as to policy.

Senseramente,

LOURDES A. LEON GUERRERO
Maga'hågan Guåhan
Governor of Guam

cc: M.Thomas Nadeau, Chief Environmental Public Health Officer of the Division of Environmental Health (masatomo.nadeau@dphss.guam.gov)

ELECTRONIC COPY OF:

1. PROPOSED RULES AND REGULATIONS FOR PUBLIC SWIMMING POOLS AND ITS ECONOMIC IMPACT STATEMENT

2. TRANSCIPT OF PUBLIC HEARING MINUTES

3. AUDIO RECORDING OF THE PUBLIC HEARING MINUTES

Files Currently on the Disc (12)

(1) Approval letter from the OAG.pdf

(2) Audio Recording of the Public Hearing on the Proposed Swimming Pool Regulations 10.18.18.WAV

(3) Draft Summary of Revisions to the Proposed Swimming Pool Regulations 12.27.18.docx

(4) Economic Impact Statement for the Proposed Public Swimming Pool Regulations_Appendix A (Final).pdf

(5) Economic Impact Statement for the Proposed Public Swimming Pool Regulations_Appendix B (Final).pdf

(6) Economic Impact Statement for the Proposed Swimming Pool Regulations 10.17.18 (Final).pdf

(7) Guidance for Formatting Rules and Regulations.pdf

(8) Proposed Rules and Regulations for Public Swimming Pools 12.31.18 (Final).docx

(9) Proposed Rules and Regulations for Public Swimming Pools 12.31.18 (Final).pdf

(10) Public Hearing Notice 09.30.18.pdf

(11) Public Hearing Notice 10.04.18.pdf

(12) Transcibed Public Hearing Minutes for the Proposed Swmming Pool Regulations 12.05.18 (Final).pdf

Office of the Attorney General of Guam

590 S. Marine Corps Drive, Suite 901 ♦ Tamuning, GU 96911
Phone 671.475.3324 extension 5015 ♦ **Fax** 671.477-4703 ♦ **Email** law@guamag.org

Hon. Leevin Taitano Camacho
Attorney General of Guam

February 11, 2019

Linda Unpingco DeNorcey
Acting Director
Department of Public Health and Social Services
123 Chalan Kareta
Mangilao, Guam 96913-6304

FEB 14 2019

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Sincerely,

LEEVIN TAITANO CAMACHO
Attorney General

Enclosure

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FEB 13 2019
DPH&SS
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2/13/19

To	Initial	Date
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File		

RECEIVED
FEB 14 2019
DIVISION OF ENVIRONMENTAL HEALTH

Summary of Revisions

Proposed Rules and Regulations for Public Swimming Pools

#	Topic	Public Comment	Revised Language
1	**Chemical Storage Space**	Pool chemical use fluctuates depending on factors such as sunlight and bather load. The public asked to allow them to store a day's worth of chemical in the pump room for easy access.	**§4607(s).** It shall be the responsibility of the Sanitary Permit holder of the public swimming pool to comply with all applicable codes (i.e., standards of Guam Fire Department and Guam Environmental Protection Agency) when storing chemicals necessary for maintenance purposes, operation, or sanitation of equipment in the EQUIPMENT ROOM.
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3	**Barriers and Enclosures**	The 6-foot fence requirement is unreasonable and destroys the aesthetics of the hotel.	**§4644.** A PUBLIC SWIMMING POOL is exempt from the provisions relating to BARRIERS and ENCLOSURES under §4627 and §4630 when all of the following alternative safety measures are in place: (1) 24-hour manned security; (2) monitored video surveillance of the entire perimeter of the facility; and (3) signage posted in a conspicuous place communicating that unauthorized entry is prohibited.
4	**Inspection and Grading**	The public wanted to see how the proposed demerit system would look like.	**§4641(d).** (1) The operator shall at the time of inspection correct a violation of a CRITICAL ITEM of these rules and regulations. Considering the nature of the potential hazard involved and the complexity

DRAFT

			of the corrective action needed, the DIRECTOR may agree to or specify a longer time frame, not to exceed 10 calendar days after the inspection, for the operator to correct violations of a CRITICAL ITEM. (2) The operator shall correct noncritical violations by a date and time agreed to or specified by the DIRECTOR but no later than 30 calendar days after the inspection. The DIRECTOR may approve a compliance schedule that extends beyond this time limit if a written schedule of compliance is submitted by the operator and no health hazard exists or will result from allowing an extended schedule of compliance.

_____ _____
Name of Facility *Person Completing Survey (Print Name)*

Part I: Barriers and Enclosures

The proposed *Rules and Regulations for Public Swimming Pools* (Section 4627) contain a provision which requires swimming pools to be enclosed by any combination of building envelope, walls, or fencing not less than six feet in height. In addition, gates or doors that form part of such enclosure shall be self-closing or self-latching to prevent unauthorized entry.

§4627. All swimming pools, chemical storage spaces, and mechanical spaces shall be enclosed to prevent unauthorized entry. The enclosure may consist of any combination of building envelopes, site walls, or fencing and shall not be less than six feet in height measured from the finished grade to the top of the barrier on the side outside of the barrier surrounding the swimming pool. Chain-link fencing constructed of a maximum opening of 1 ¾ inches mesh shall be permitted. All primary public access gates or doors serving as part of a swimming pool enclosure or required swimming pool enclosure shall be self-closing and self-latching from any open position. All gates or doors shall be capable of being locked from the exterior and shall be at least equal in height at top and bottom to the barrier of which they are a component. Turnstiles shall not form a part of a swimming pool enclosure. For unguarded swimming pools, self-latching mechanisms must be located not less than four and a half feet above finished grade.

1. Will your facility be able to comply with this requirement?

   YES_____ NO_____ (*If you answered "YES," you do not need to complete the rest of Part I. Please go on to Part II. If "NO," please continue below.)*

2. If "NO," and the *Rules and Regulations for Public Swimming Pools* are adopted, what is the anticipated cost your facility will incur in meeting this requirement**?** *(Please mark one only.)*

   $1 - $5, 000_____ $5,001 - $10,000_____ $10,001 - $15,000 _____

   $15,001 - $20,000 _____ $20,001 - $25,000_____ Other (please enter amount) _____

   COMMENTS:

   _____

   _____

   _____

Part II: Diaper-Changing Station

The proposed *Rules and Regulations for Public Swimming Pools* [Section 4625(b)] contain a provision which requires at least one diaper-changing station in each male and female restroom or a unisex diaper-changing station with an adjacent hand wash sink for swimming pools allowing use by diaper-aged bathers.

§4625(b). All swimming pools allowing use by diaper-aged bathers (i.e., children less than five years of age) shall have at least one diaper changing station in each male and female hygiene facility or make available a unisex diaper changing station. Diaper changing units shall conform to the ASTM Standard F2285-04:

Consumer Performance Standards for Commercial Diaper-Changing Stations or the standards for diaper-changing surfaces in the most current version of Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care Programs.

3. Does your facility allow use by children less than five years of age?

   YES_____ NO_____ (*If you answered "NO," you do not need to complete the rest of Part II. Please go on to Part III. If "YES," please continue below.)*

4. If "YES," and the *Rules and Regulations for Public Swimming Pools* are adopted, what is the anticipated cost your facility will incur in meeting this requirement? *(Please mark one only.)*

   $1 - $5, 000_____ $5,001 - $10,000_____ $10,001 - $15,000 _____

   $15,001 - $20,000 _____ $20,001 - $25,000_____ Other (please enter amount) _____

   COMMENTS:

   _____

   _____

   _____

Part III: Chemical Storage Space

The proposed *Rules and Regulations for Public Swimming Pools* [Section 4607(r)] contain a provision which requires at least one space dedicated for chemical storage, which shall be separate from the equipment room. In addition, an emergency eye wash station shall be provided in all chemical storage spaces.

§4607(r). At least one space dedicated to chemical storage space shall be provided to allow safe storage of the chemicals present. An emergency eye wash station shall be provided in all chemical storage spaces. The chemical storage space shall be separate from the equipment room.

5. Will your facility be able to comply with this requirement?

   YES_____ NO_____ (*If you answered "YES," you do not need to complete the rest of Part III. Please go on to Part IV. If "NO," please continue below.)*

6. If "NO," and the *Rules and Regulations for Public Swimming Pools* are adopted, what is the anticipated cost your facility will incur in meeting this requirement? *(Please mark one only.)*

   $1 - $5, 000_____ $5,001 - $10,000_____ $10,001 - $15,000 _____

   $15,001 - $20,000 _____ $20,001 - $25,000_____ Other (please enter amount) _____

   COMMENTS:

   _____

   _____

Part IV: Qualified Operator

The proposed *Rules and Regulations for Public Swimming Pools* (Section 4634) contain a provision which requires a "qualified operator" to be present on-site or immediately available within two hours during all hours of operation at certain types of swimming pools. Such operator shall have passed an operator training course.

> *§4634(a). Every public swimming pool shall be under the supervision of a qualified operator who shall assume the responsibility for compliance with all parts of these rules and regulations relating to pool operation and maintenance and safety of bathers. A qualified operator shall have completed an operator training course that is recognized by the department. Originals or copies of such course certificate or documentation shall be available on site for inspection by the health officer for each qualified operator employed at or contracted by the site.*

7. Does your swimming pool fall under any of the following category? *(Please mark all that applies.)*

   (a) has more than two swimming pools
   (b) has over 50,000 gallons of water
   (c) includes features with recirculated water
   (d) is used to provide swimming training
   (e) allows bather count of greater than 200 bathers daily
   (f) is operated by a municipality or school
   (g) none of the above

   [If you answered (g), you do not need to complete the rest of Part IV. Please go on to Part V. If you answered (a) to (f), please continue below.]

8. Does your facility have an operator who completed a pool operator training program? (ex: Certified Pool Operator from the National Swimming Pool Foundation)

   YES_____ NO_____

   COMMENTS:

   _____

   _____

   _____

Part V: Pool Maintenance

The proposed *Rules and Regulations for Public Swimming Pools* (Sections 4607-4633 and 4635-4636) contain provisions which require swimming pool and associated structures/systems to be kept clean and in good repair.

9. Does your facility expend resources for the cleaning, repair, and maintenance of the swimming pool and associated systems/structures, including decks, electrical distribution, filtration, lighting, plumbing, recirculation system, showers, toilets, and water heaters?

   YES_____ NO_____ (*If you answered "NO," you do not need to complete the rest of Part V. Please go on to Part VI. If "YES," please continue below.)*

10. If "YES," what is the annual cost of the materials, supplies, equipment, and labor for maintaining your swimming pool systems and structures? *(Please mark one only.)*

    $1 - $5, 000_____ $5,001 - $10,000_____ $10,001 - $15,000 _____

    $15,001 - $20,000 _____ $20,001 - $25,000_____ Other (please enter amount) _____

    COMMENTS:

    _____

    _____

    _____

Part VI: Coming into Compliance

Not including the provisions mentioned above, there are a number of required parameters public swimming pools must meet according to the proposed *Rules and Regulations for Public Swimming Pools*. Some of these provisions require that swimming pools shall have floors and walls that are white or light pastel in color; pool floors less than three-feet deep and pool stairs shall be slip-resistant; diving boards, stair treads, and handrails shall conform to the standards specified in the proposed regulations; pool depth markings shall be present and easily visible; at least two means of pool access and egress shall be provided; a continuous deck that provides at least four feet of clearance from pool edge to fence shall be available for lifeguard roaming and surveillance; telephone and safety devices shall be easily accessible to patrons; and adequate lighting (10-30 foot candle depending on the area) shall be provided for night swimming.

11. Does your facility have existing structure or equipment that requires modification, removal, or replacement to come into compliance with the proposed regulations?

    YES_____ NO_____ (*If you answered "NO," you do not need to complete the rest of Part VI. Please submit the completed survey to DEH. If "YES," please continue below.)*

12. If "YES," what is the total cost your facility will likely incur to ensure all requirements in the proposed regulations are met? *(Please mark one only.)*

    $1 - $5,000_____ $5,001 - $10,000_____ $10,001 - $15,000 _____

    $15,001 - $20,000 _____ $20,001 - $25,000_____ Other (please enter amount) _____

COMMENTS:

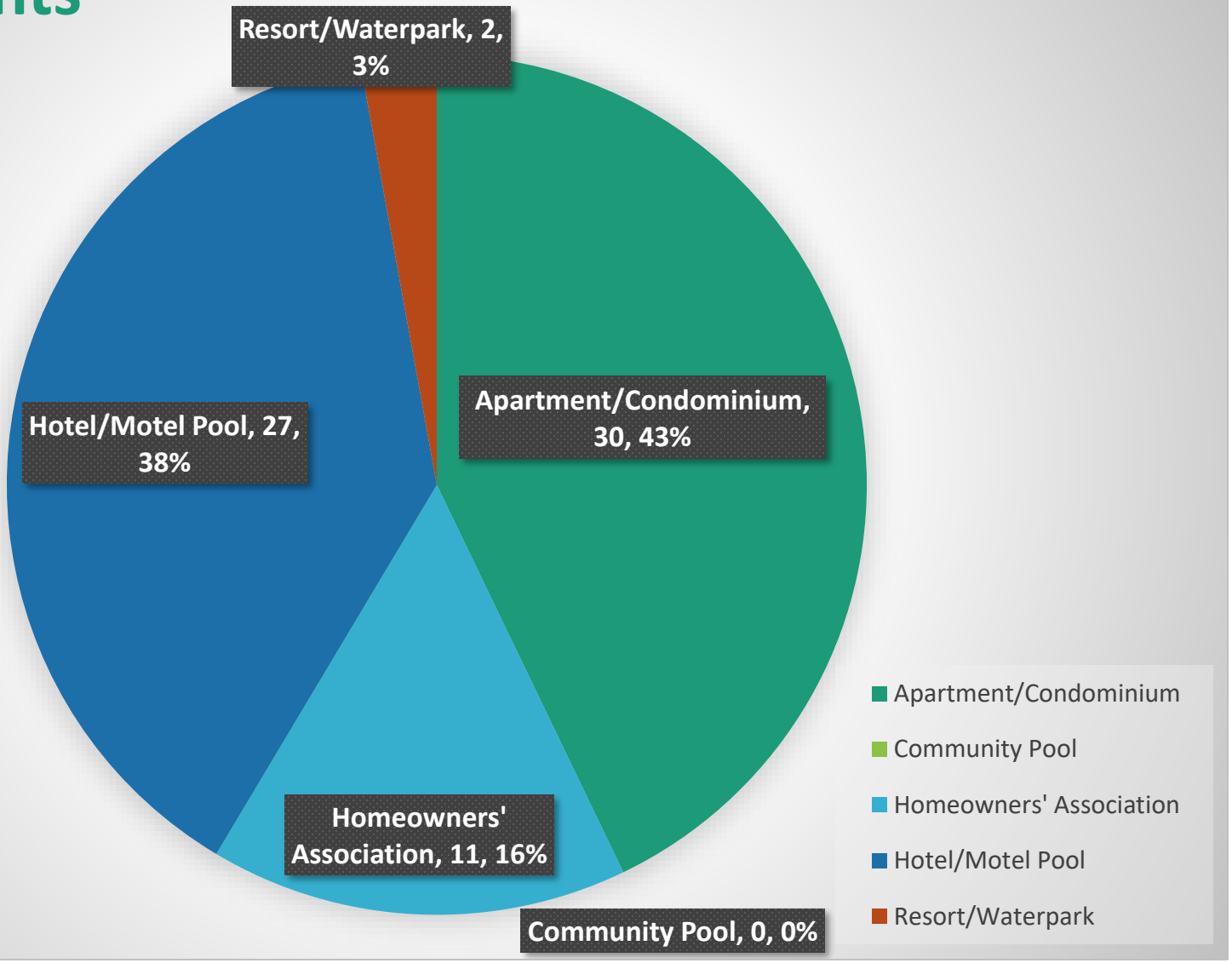
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End of Survey
Please submit the completed form to DEH by Friday, April 20, 2018.
Thank you for your participation!

Respondents



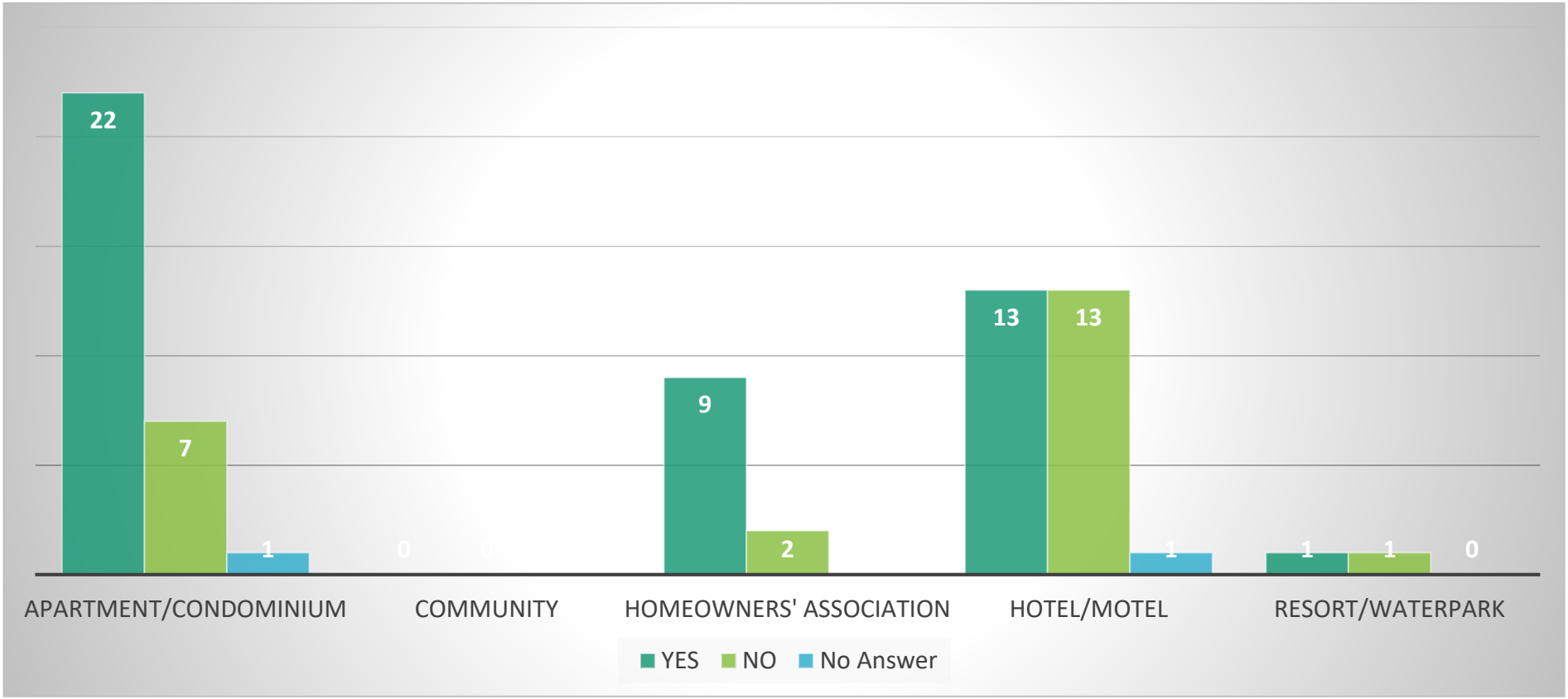
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Breakdown of Swimming Pools

Type of Swimming Pool	No. of Swimming Pools Surveyed	No. of Swimming Pools Responded	% Responded
Apartment/Condominium	36	30	86%
Community	3	0	0%
Homeowners' Association	12	11	92%
Hotel/Motel	47	27	57%
Resort/Waterpark	9	2	22%
TOTAL	**107**	**70**	**65%**

Part I. Barriers and Enclosures

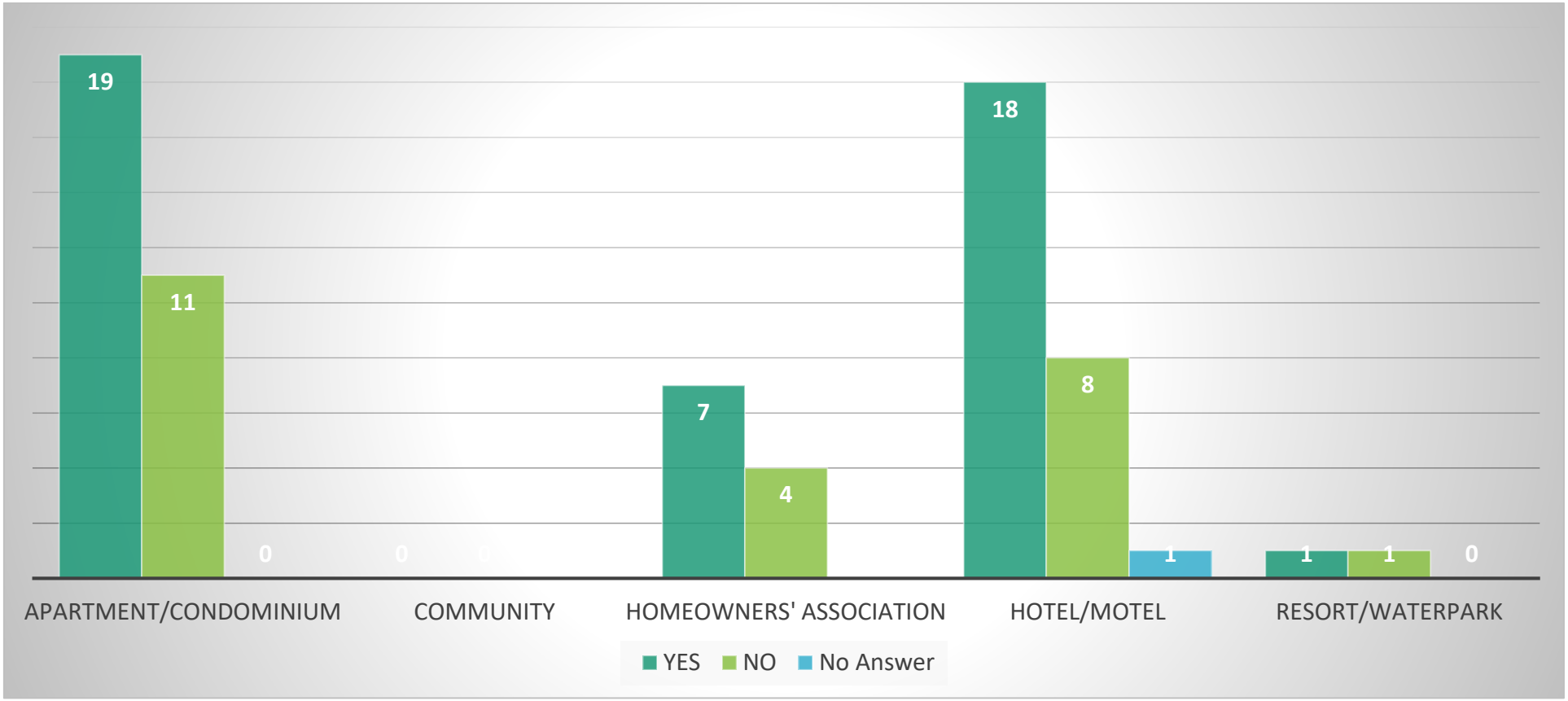
Will your facility be able to comply with this requirement*?



*The proposed *Rules and Regulations for Public Swimming Pools* (Section 4627) contain a provision which requires swimming pools to be enclosed by any combination of building envelope, walls, or fencing not less than six feet in height. In addition, gates or doors that form part of such enclosure shall be self-closing or self-latching to prevent unauthorized entry.

Part II. Diaper-Changing Stations

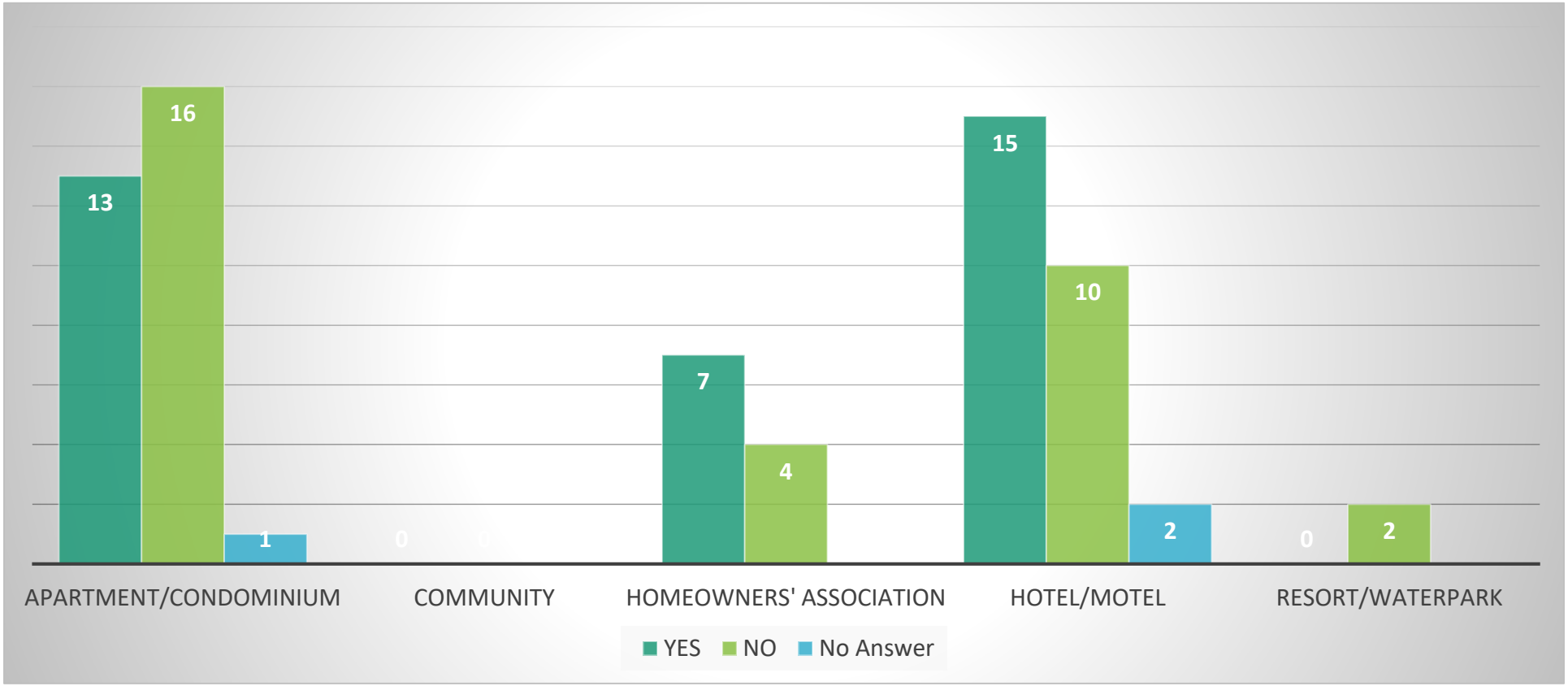
Does your facility allow use by children less than five years of age?



The proposed *Rules and Regulations for Public Swimming Pools* [Section 4625(b)] contain a provision which requires at least one diaper-changing station in each male and female restroom or a unisex diaper-changing station with an adjacent hand wash sink for swimming pools allowing use by diaper-aged bathers.

Part III. Chemical Storage Space

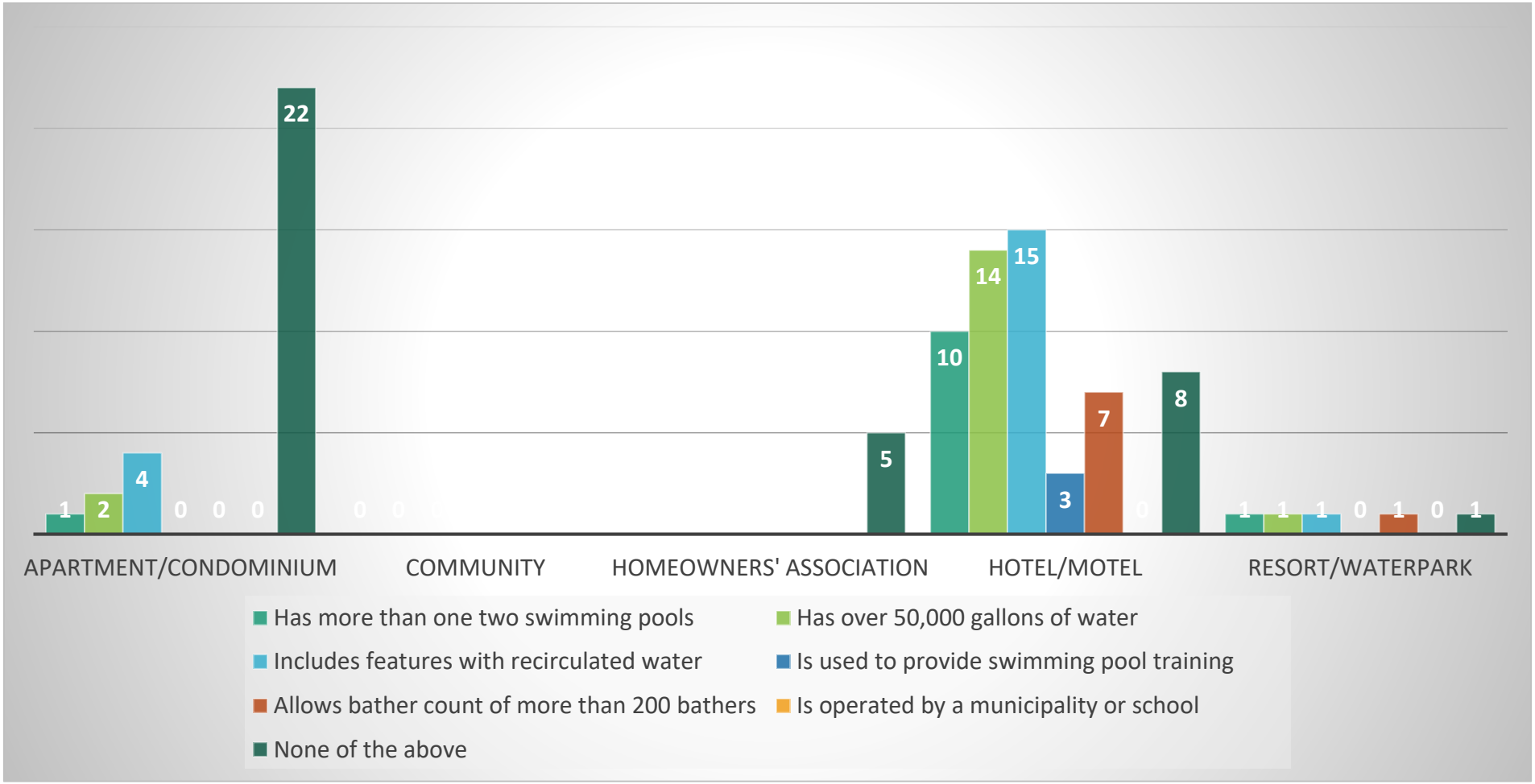
Will your facility be able to comply with this requirement*?



*The proposed *Rules and Regulations for Public Swimming Pools* [Section 4607(r)] contain a provision which requires at least one space dedicated for chemical storage, which shall be separate from the equipment room. In addition, an emergency eye wash station shall be provided in all chemical storage spaces.

Part IV. Qualified Operator

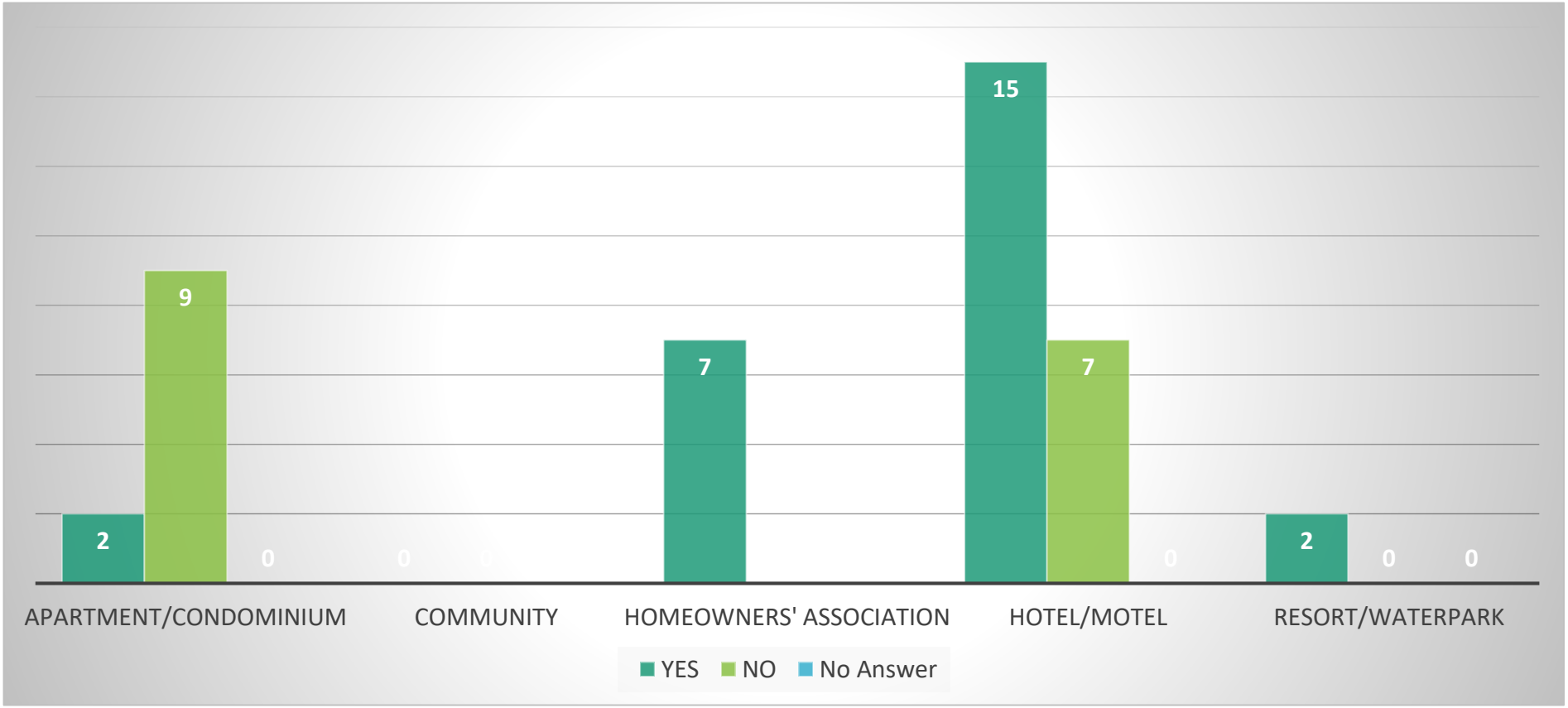
Does your facility fall under any of the following category?



Note: Some facilities indicated that they fall under more than one of the listed categories.

Part IV. Qualified Operator

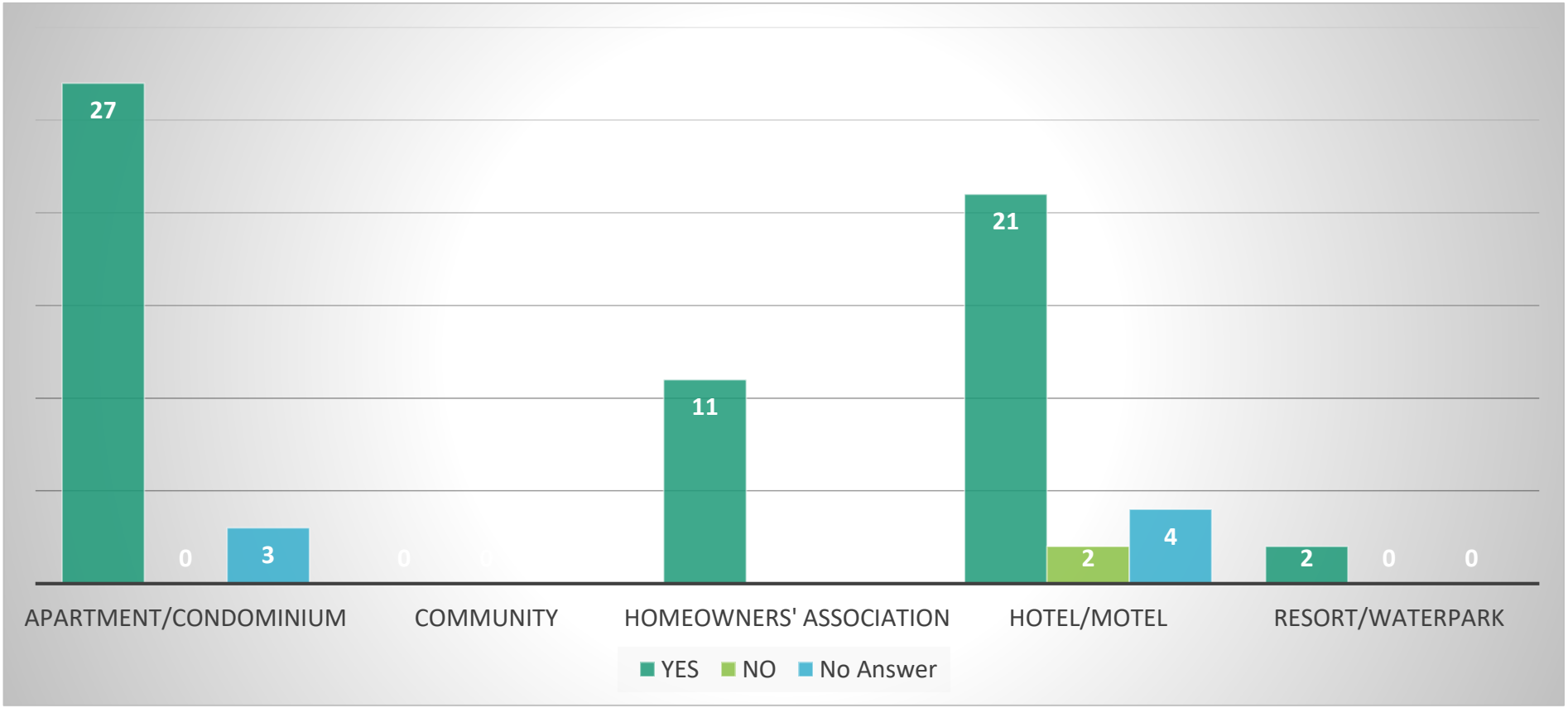
Does your facility have an operator who completed a pool operator training program? (ex: Certified Pool Operator from the National Swimming Pool Foundation)



The proposed *Rules and Regulations for Public Swimming Pools* (Section 4634) contain a provision which requires a "qualified operator" to be present on-site or immediately available within two hours during all hours of operation at certain types of swimming pools. Such operator shall have passed an operator training course.

Part V. Pool Maintenance

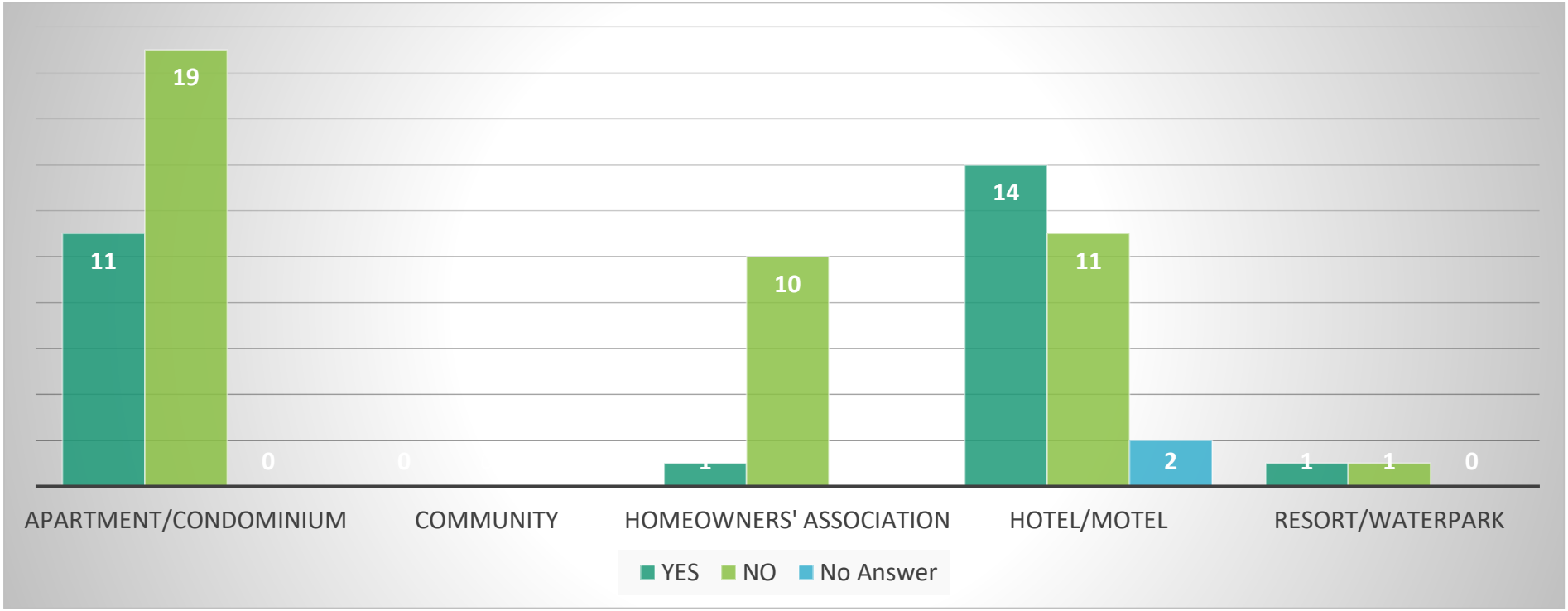
Does your facility expend resources for the cleaning, repair, and maintenance of the swimming pool and associated systems/structures, including decks, electrical distribution, filtration, lighting, plumbing, recirculation system, showers, toilets, and water heaters?



The proposed *Rules and Regulations for Public Swimming Pools* (Sections 4607-4633 and 4635-4636) contain provisions which require swimming pool and associated structures/systems to be kept clean and in good repair.

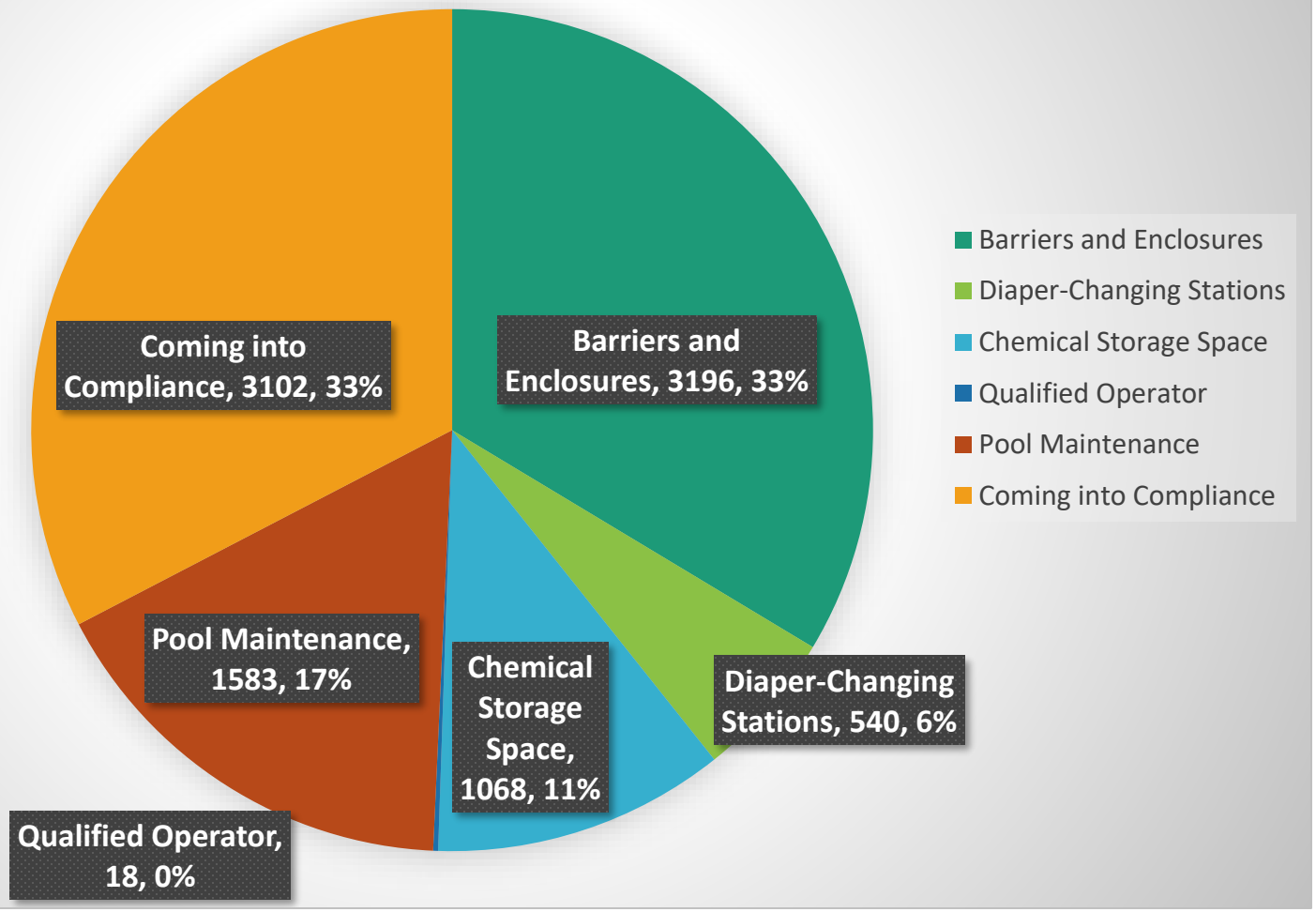
Part VI. Coming into Compliance

*Does your facility have existing structure or equipment that requires modification, removal, or replacement to come into compliance with the proposed regulations?



*Not including the provisions mentioned above, there are a number of required parameters public swimming pools must meet according to the proposed *Rules and Regulations for Public Swimming Pools*. Some of these provisions require that swimming pools shall have floors and walls that are white or light pastel in color; pool floors less than three-feet deep and pool stairs shall be slip-resistant; diving boards, stair treads, and handrails shall conform to the standards specified in the proposed regulations; pool depth markings shall be present and easily visible; at least two means of pool access and egress shall be provided; a continuous deck that provides at least four feet of clearance from pool edge to fence shall be available for lifeguard roaming and surveillance; telephone and safety devices shall be easily accessible to patrons; and adequate lighting (10-30 foot candle depending on the area) shall be provided for night swimming.

Total Estimated Financial Impact (in Thousand Dollars)



RULES AND REGULATIONS FOR PUBLIC SWIMMING POOLS

ECONOMIC IMPACT STATEMENT

Title 5 Guam Code Annotated, Chapter 9, Article 3

DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES
DIVISION OF ENVIRONMENTAL HEALTH
123 Chalan Kareta
Mangilao, Guam 96913-6304
(671) 735-7221

Final 10.03.18

Doc. No. 35GL-19-0269.*CD

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EXECUTIVE SUMMARY

The Division of Environmental Health (DEH) of the Department of Public Health and Social Services (DPHSS) is proposing to repeal and replace the existing *"Rules and Regulations for Public Swimming Pools"* with a revised and updated version with the same name. The proposal seeks to safeguard public health and provide a swimming environment that is conducive to good health and safety for the people of Guam. As defined in Title 10 GCA, Chapter 29, public swimming pool is "any swimming pool that is available for public use, whether for a fee or free of charge, or any swimming pool used by any business, partnership, corporation or person for the use of their customers, clients, guests or employees including, but not limited to: a commercial pool; a community pool or pool at a hotel, motel, resort, auto park, trailer park, apartment house, or other multiple rental unit; private club; public club; and public or private school, gymnasium, or health establishment."

The second edition of the Centers for Disease Control and Prevention's (CDC) Model Aquatic Health Code (MAHC) was used as a template in updating these regulations. The MAHC is a guidance document developed with regulators and swimming pool professionals reflecting the latest available scientific information and best practices in the industry. The primary goal of the proposed regulations is to prevent and reduce the number of injuries and illnesses in public swimming pools. In Fiscal Year 2018, there were a total of 107 public swimming pools and wading pools regulated by DEH. If adopted, the proposed regulations will govern the operation of these swimming pools and impact the health and safety of more than 200,000 local and tourist bathers on island.

To aid in the economic impact assessment of the proposed regulations, DEH analyzed available data from CDC, several national scientific reports, and survey results from affected local, regulated swimming pools. Both direct and indirect economic impacts are presented here. Direct costs include medical expenses incurred to treat or alleviate illnesses, while indirect costs are earnings loss by bathers who have to take time off from work due to illness, or by parents or guardians who have to take care of the sick child. The analysis represents DEH's best estimate of these economic impacts. Other possible impacts such as long-term health consequences, pain and suffering of sick bathers, time lost from work or school, and possible lawsuits are not quantified in this analysis but are equally important and should also be mentioned.

To determine the anticipated, direct economic impact the adoption of the proposed regulations may have on Guam swimming pools, a survey questionnaire was distributed to all 107 public swimming pools on island that would be affected by the proposed regulations. These include all community pools, resorts and waterparks, and pools at hotels, apartments, and condominiums. DEH attempted to conduct a census survey, but because not every swimming pool responded, a sample survey was done instead. The survey focused on the six provisions in the proposed regulations that were deemed by DEH to have the greatest economic impact: (1) barriers and enclosures; (2) diaper-changing stations; (3) chemical storage space; (4) qualified operator; (5) pool maintenance; and 6) coming into compliance. Seventy responses (65%) were received for this survey.

Analysis of the survey results relating to the cleaning, repair, and maintenance of swimming pools showed that the existing requirements in the proposed regulations have a direct financial impact of $1,583,000 on Guam public swimming pools annually. It should be emphasized that this cost is not a new or additional burden to the facilities as this is what they have been spending annually to comply with the existing requirements in the regulations, which have been in place for the past 38 years.

On the other hand, results of the survey associated with the proposed changes indicated that the adoption of the regulations will have a direct total financial impact of $7,923,775 to the swimming pools in the first two years of its implementation due to the one-time costs for the replacement or modification of structures and purchase of additional equipment. The projected cost, based on survey results:

- Barriers and enclosures (Projected one-time cost = $3,195,500)
- Diaper-changing stations (Projected one-time cost = $540,000)
- Chemical storage space (Projected one-time cost = $1,068,500)
- Qualified operator (Projected one-time cost = $17,775)
- Coming into compliance (Projected one-time cost = $3,102,000)

Existing, permitted facilities may apply for an exemption from some of the requirements, including the provision on barriers and enclosures. Thus, the actual financial impact may be much less than the cost estimated in the survey. In addition, the proposed regulations allow two years, from the date of its effectivity, for all existing public swimming pools to come into compliance with the new requirements; thus, the amount of $7,923,775 derived from the survey can be spread over a period of two years. This means that the annual cost of complying to the proposed requirements is about $3,961,888. If the costs are equally distributed to all the affected swimming pools, the economic impact to the industry is $101.44/day for the first two years. After the two-year implementation period, the cost to the industry will significantly be lower as only the cost to maintain the facilities will remain. While the increased costs that will result from the adoption of the proposed regulations may be deemed as an adverse impact to the affected establishments, the overall impact will be beneficial to the economy and the health of the population from the expected reduction in the number of injured or sick bathers on island and its associated economic burden.

One of the illnesses that the proposed regulations aim to prevent with the new provision on diaper-changing stations is cryptosporidiosis. This infection is caused by *Cryptosporidium*, an extremely chlorine-tolerant parasite that may proliferate more than seven days after a diarrheal event in an adequately chlorinated pool. Cryptosporidiosis has not been reported on Guam, and it's uncertain if the absence of any reported cases is due to lack of testing for such parasite on Guam, similar to many diarrheal complaints seen on the island. Regardless, potential of such infection is high as several studies have confirmed that it has worldwide incidence. According to CDC, about 22,000 pool-related infections are caused by *Cryptosporidium* in 2018 and the total medical and work loss costs for this type of infection is approximately $2,800 per person. If these figures are applied to the estimated number of bathers on Guam, the economic burden of cryptosporidiosis is about $2,976,400 annually. While the implementation of the proposed regulations is not expected to prevent all cryptosporidiosis in public swimming pools, it will decrease the risk for this type of gastrointestinal infection.

Drownings, both fatal and non-fatal, are unfortunate accidents in swimming pools that may be prevented by restricting access to certain pool areas from unsupervised children. By requiring fences and gates, and improving lifeguard bather surveillance, which are both included in the proposed regulations, incidences of drowning may be mitigated. A U.S. Consumer Product Safety Commission (CPSC) report revealed that approximately 7,300 people visited emergency room departments in 2017 due to non-fatal pool-related drowning. In Guam, local newspapers reported a drowning incident that happened in a hotel pool in August 2017 involving a toddler, which required her to be rushed to the hospital. The CDC's Web-based Injury Statistics Query and Reporting System estimates that the annual hospitalization cost for unintentional drowning is about $284,235 per case. If the annual non-fatal pool-related drowning incidence rate of about 0.01% is applied to the total number of bathers on Guam, approximately three non-fatal drownings can be attributed to swimming pools on island. This translates to an annual medical cost of about $852,705. The proposed regulations are not expected to prevent all drownings on public swimming pools, but a reduction may be achieved by implementing the provisions for barriers and enclosures.

Another public health concern that is addressed by some provisions in the proposed regulations is injury caused by inadequate storage and improper handling of pool chemicals. The proposed regulations require designated chemical storage space, pool operator training, and additional engineering controls to prevent accidental exposure of bathers and pool staff to chemicals. According to a CPSC report, the hospitalization cost for chemical burns was roughly $18,327 per case in the year 2000. If the CDC reported rate for number of people who required treatment due to pool chemical injuries, which is 1.6 per 100,000, is applied to the total number of bathers on Guam, it can be estimated that the cost of pool-related chemical injuries is about $65,308 annually.

Based on the above estimations, the combined annual medical cost of cryptosporidiosis, drowning, and chemical injury associated with swimming pools on Guam is approximately $3.9 million. It should be emphasized that this figure does not include long-term health consequences, possible civil lawsuits, and other indirect costs associated with these illnesses, which DEH expects to result in significant economic burden to the community. In addition, other notable diseases or injuries that may be acquired from public swimming pools are not quantified in this analysis, such as ear infections, pink eye, gastrointestinal infections caused by other types of pathogens, falls, and entrapment injuries. The annual medical savings from the decreased incidence of cryptosporidiosis, drowning, and chemical injury roughly equal the yearly implementation cost of the proposed regulations. However, after the two-year implementation period when alterations and modifications of facilities are already in place and only the cost of pool maintenance remains, the medical savings from the prevention of these three health events will greatly offset the compliance cost.

I. Purpose and Need

Pursuant to Title 10 GCA Chapter 21, a Sanitary Permit from the Division of Environmental Health (DEH) of the Department of Public Health and Social Services (DPHSS) is required for the lawful operation of certain businesses. The issuance of a Sanitary Permit enables DEH to regulate the applicable establishments to ensure that these facilities are sanitary and operate in such a manner as to protect the public from environmental hazards. Businesses possessing a Sanitary Permit are required to allow the access and inspection of its regulated facility by DEH. One type of regulated businesses is public swimming pools.

DEH conducts compliance inspections of public swimming pools to ensure these establishments operate in a manner, and possess the physical assets, to protect the health and safety of Guam's people. These regulatory inspections are conducted through the implementation of adopted rules and regulations that provide the sanitary operation and physical requirements, which establishments must comply with, such as:

- Design standards and construction
- Recirculation system
- Filter requirements
- Disinfection and water quality
- Hygiene facilities
- Electrical, lighting, and ventilation requirements
- Pool operation, cleaning, and maintenance
- Safety requirements
- Bather supervision

Currently, DEH imposes the "*Rules and Regulations for Public Swimming Pools*" for the regulatory control of public swimming pools. This document was adopted in 1980. DEH determined that there are some provisions in the existing regulations that need to be expanded and clarified to prevent recreational water illnesses and injuries to bathers on Guam.

Swimming is one of the favorite recreational activities in the U.S. partly due to its many health benefits. In fact, a National Sporting Goods Association survey revealed that swimming is the fourth most popular sports activity in 2009.[1] More than fifty million people, or about 18% of the population, reported to have swam more than six times that year,[2] resulting in about 301 million swimming instances. No local data was found to determine the number of swimming instances on Guam; however, presumably, this number may be a lot higher on island since swimming is a year-round activity as opposed to the mainland U.S. where it only peaks during the summer season. If the national rate of 18% is applied to the total local[3] and tourist population[4] on Guam, and assuming that these people swim at least three times a year, the number of swimming instances on island could easily be about 716,000.

Considering the number of times people swim in a year, it is easy to understand how likely they are to contract a disease or be exposed to chemical or physical injury when swimming in treated waters. A CDC report in May 2018 revealed that 27,219 people fell sick and eight died in the U.S. due to infectious disease outbreaks in treated recreational waters during 2000-2014.[5] Interestingly,

the same report determined that most of these outbreaks occurred in hotel swimming pools and hot tubs.

The leading cause of injury death in children less than four years of age is submersions, or drowning, and more than half of these cases occur in pools.[6] Non-fatal drownings, on the other hand, resulted in 7,300 emergency-department visits in 2017, according to the Consumer Product Safety Commission (CPSC).[7] The CPSC report also showed that two-thirds of non-fatal drownings among children ages one to four years occur in pools. Safeguards from drowning and entrapment, such as installation of fencing and gates, availability of approved safety equipment, and improved lifeguard surveillance are incorporated in the proposed regulations to minimize injuries to bathers, and prevent such debilitating and sometimes life-threatening events.

Pool chemicals are important in minimizing the risk for transmission of infectious pathogens among bathers. At the same time, these chemicals may also be cause of injury to patrons and pool staff if handled improperly. In 2012, CPSC's National Electronic Injury Surveillance System estimated that about 4,900 persons were treated in emergency room departments for pool chemical-related injuries.[8] Almost half of these patients were less than 18 years of age. In addition, there have been several reports of mass chlorine exposures in pools due to lack of education or training among pool operators, such as the 2015 incident in Antioch, California, where almost 40 children were rushed to the hospital for vomiting, coughing, and eye irritation.[9]

With the adoption of the "*Rules and Regulations for Public Swimming Pools,"* DPHSS seeks to prevent and reduce the risk of illness, drowning, and injury in Guam swimming pools. Many of these hazards are preventable and are addressed in the proposed regulations. For example, by updating the requirement for pool operator training, as provided in the proposed regulations, the spread of infectious diseases caused by poor maintenance of swimming pools and the risk for pool chemical-related injuries would be mitigated.

II. Financial Impact

A. Financial Impact of the Proposed Regulations

The most significant provisions that would likely have the greatest financial impact to public swimming pools are barriers and enclosures; diaper-changing station; chemical storage space; qualified operator; pool maintenance; and coming into compliance.

1. Existing regulations is silent in the requirement of barriers and enclosures in public swimming pools. In the proposed regulations, all swimming pools, chemical storage spaces, and mechanical spaces shall be enclosed to prevent unauthorized entry. As a result, pool facilities will need to provide any combination of building envelopes, site walls, fencing, and gates. To comply with this requirement, pool facilities may need to modify landscaping structures and erect walls and fences, which may come at a significant cost to them.

2. Although hygiene provisions are specified in the current regulations, no mention of the requirement for diaper-changing stations is made. The proposed regulations will

require at least one diaper-changing station be provided in each male and female restroom, which shall be located not greater than 200-feet walking distance from nearest entry/exit of swimming pools designed primarily for children less than five years of age. To meet this requirement, some pool facilities may need to purchase, repair, or install diaper-changing units in designated areas. These will cause additional expenses on the affected facility.

3. Current regulations state that chlorine and chlorinating equipment shall be in a separate room. The proposed regulations updated this provision by requiring at least one enclosed space dedicated to allow for safe storage of all chemicals, which shall be separate from the equipment room. The cost of compliance will most likely derive from the construction of these chemical storage spaces.

4. Existing regulations require that swimming pools be under the supervision of an operator who shall be responsible for the pool maintenance and safety of bathers. The proposed regulations seek to enhance this provision by requiring that qualified operators complete a pool operator training course that is recognized by DPHSS. This may result in some facilities having to hire a qualified operator or sending their employees to recognized training courses, which will be added expenditures to the facilities.

5. The proposed regulations contain provisions which require pool facilities to be kept clean and in good repair. Consequently, these facilities may need to purchase additional supplies, or repair existing structures or systems such as decks, electrical and filtration/recirculation systems, showers, toilets, or water heaters, which may result in additional costs.

6. Other provisions in the current regulations have been updated or revised. These include requiring swimming pools floors and walls to be white or light pastel in color; pool floors less than three-feet deep and pool stairs be slip-resistant; diving boards, stair treads, and handrails to conform to specific standards; pool depth markings be present and easily visible; at least two means of pool access and egress be provided; a continuous deck that provides at least four feet of clearance from pool edge to fence be available for lifeguard roaming and surveillance; telephone and safety devices be easily accessible to patrons; and adequate lighting (10-30 foot candle depending on the area) be provided for night swimming. Affected facilities may have to expend resources to modify, remove, or replace existing structures and equipment to come into compliance with the proposed regulations

To assess the direct financial impact the proposed regulations may have on the 107 swimming pools on island as a result of the adoption and implementation of the six provisions noted above, DPHSS attempted to conduct a census survey. However, not all swimming pools responded; sixty-five percent of the total permitted public swimming pools provided a response. Thus, a sample survey was conducted instead. This survey, which was prepared in the form of a questionnaire (**Appendix A**), asked the following twelve questions to public swimming pools currently possessing a Sanitary Permit with the Department:

Part I: Barriers and Enclosures

1. *The proposed Rules and Regulations for Public Swimming Pools (Section 4627) contain a provision which requires swimming pools to be enclosed by any combination of building envelope, walls, or fencing not less than six feet in height. In addition, gates or doors that form part of such enclosure shall be self-closing or self-latching to prevent unauthorized entry. Will your facility be able to comply with this requirement?*
2. *If "NO," and the Rules and Regulations for Public Swimming Pools are adopted, what is the anticipated cost your facility will incur in meeting this requirement**?***

Part II: Diaper-Changing Station

3. *The proposed Rules and Regulations for Public Swimming Pools [Section 4625(b)] contain a provision which requires at least one diaper-changing station in each male and female restroom or a unisex diaper-changing station with an adjacent hand wash sink for swimming pools allowing use by diaper-aged bathers. Does your facility allow use by children less than five years of age?*
4. *If "YES," and the Rules and Regulations for Public Swimming Pools are adopted, what is the anticipated cost your facility will incur in meeting this requirement?*

Part III: Chemical Storage Space

5. *The proposed Rules and Regulations for Public Swimming Pools [Section 4607(r)] contain a provision which requires at least one space dedicated for chemical storage, which shall be separate from the equipment room. In addition, an emergency eye wash station shall be provided in all chemical storage spaces. Will your facility be able to comply with this requirement?*
6. *If "NO," and the Rules and Regulations for Public Swimming Pools are adopted, what is the anticipated cost your facility will incur in meeting this requirement?*

Part IV: Qualified Operator

7. *The proposed Rules and Regulations for Public Swimming Pools (Section 4634) contain a provision which requires a "qualified operator" to be present on-site or immediately available within two hours during all hours of operation at certain types of swimming pools. Such operator shall have passed an operator training course. Does your swimming pool fall under any of the following category?*
8. *Does your facility have an operator who completed a pool operator training program? (ex: Certified Pool Operator from the National Swimming Pool Foundation)*

Part V: Pool Maintenance

9. *The proposed Rules and Regulations for Public Swimming Pools (Sections 4607-4633 and 4635-4636) contain provisions which require swimming pool and associated structures/systems to be kept clean and in good repair. Does your facility expend resources for the cleaning, repair, and maintenance of the swimming pool and associated systems/structures, including decks, electrical distribution, filtration, lighting, plumbing, recirculation system, showers, toilets, and water heaters?*
10. *If "YES," what is the annual cost of the materials, supplies, equipment, and labor for maintaining your swimming pool systems and structures?*

Part VI: Coming into Compliance

11. *Not including the provisions mentioned above, there are a number of required parameters public swimming pools must meet according to the proposed Rules and Regulations for Public Swimming Pools. Some of these provisions require that swimming pools shall have floors and walls that are white or light pastel in color; pool floors less than three-feet deep and pool stairs shall be slip-resistant; diving boards, stair treads, and handrails shall conform to the standards specified in the proposed regulations; pool depth markings shall be present and easily visible; at least two means of pool access and egress shall be provided; a continuous deck that provides at least four feet of clearance from pool edge to fence shall be available for lifeguard roaming and surveillance; telephone and safety devices shall be easily accessible to patrons; and adequate lighting (10-30 foot candle depending on the area) shall be provided for night swimming. Does your facility have existing structure or equipment that requires modification, removal, or replacement to come into compliance with the proposed regulations?*
12. *If "YES," what is the total cost your facility will likely incur to ensure all requirements in the proposed regulations are met?*

The establishments were afforded two weeks to submit their completed survey; DPHSS received a total of 58 responses during that time period. Thereafter, twelve other establishments submitted a response up to May 2018. Not all of the respondents answered every question or followed the instructions given. Several hotels had more than one permitted swimming pool or wading pool and were instructed to complete a survey for each of these pools; however, most of the hotels turned in only one survey for their establishment. Graphical results of the survey are provided in **Appendix B**.

Part I. Barriers and Enclosures

- Forty-five respondents (64%) indicated that they will be able to comply with the proposed requirements.
    - One of the respondents who indicated that compliance was possible indicated that some resources would need to be expended to meet this requirement.
- Twenty-three respondents (33%) indicated that they will not be able to meet the proposed requirements.
    - When asked what the anticipated cost their facility may incur to comply with the requirements on barriers and enclosures, the respondents selected varying cost-range from $5,000 to up to $50,000.
- Two respondents (3%) did not provide an answer to this question.

Based on the results of the survey, 64% of the pool facilities will be able to comply with the barriers and enclosures provision. Twenty-three out of the 55 respondents indicated that they will need to incur expenses to effectuate this requirement. The associated cost would most likely result from building fences and gates to secure the perimeter of the pool and prevent unauthorized access by unsupervised children.

In determining the projected direct economic impact the pool facilities would sustain in the implementation of this particular provision, the anticipated cost (Question 2 of Part I) was multiplied by the number of affected facilities. This was determined by the number of respondents for each type of swimming pool and its corresponding percentage of the total number of surveyed

swimming pools. For the responses of "other," the median range was used in the calculation. As a result, the estimated compliance cost for this provision would be $3,195,500 based on the survey responses (Table 1).

Type of Swimming Pool	Respondents	No. of Swimming Pools	Financial Impact
Apartment/ Condominium	2 = (2/8) = 25% 1 = (1/8) = 12% 1= (1/8) = 12% 2 = (2/8) = 25% 2 = (2/8) = 25%	25% x 36 = 9.0 12% x 36 = 4.3 12% x 36 = 4.3 25% x 36 = 9.0 25% x 36 = 9.0	9.0 x $5,000 = $45,000 4.3 x $15,000 = $64,500 4.3 x $20,000 = $86,000 9.0 x $25,000 = $225,000 9.0 x $50,000 = $780,000
Community	0 = (0/0) = 0%	0% x 3 = 0	$0
Homeowners' Association	1 = (1/2) = 50% 1 = (1/2) = 50%	50% x 12 = 6.0 50% x 12 = 6.0	6.0 x $5,000 = $30,000 6.0 x $10,000 = $60,000
Hotel/Motel	2 = (2/14) = 14% 5 = (5/14) = 36% 1= (1/14) = 7% 1 = (1/14) = 7% 6 = (6/14) = 43%	14% x 47 = 6.6 36% x 47 = 16.9 7% x 47 = 3.3 7% x 47 = 3.3 43% x 47 = 20.2	6.6 x $10,000 = $66,000 16.9 x $15,000 = $253,500 3.3 x $20,000 = $66,000 3.3 x $25,000 = $82,500 20.2 x $60,000 = $1,212,000
Resort and Waterpark	0/2 = 0%	0% x 2 = 0	0
		TOTAL	**$3,195,500**

Table 1. Estimated financial impact to Guam's public swimming pools to implement the barriers and enclosures provision of the proposed *Rules and Regulations for Public Swimming Pools*.

Part II. Diaper-Changing Station

- Forty-five of the respondents (64%) indicated that their facility allow use by children less than five years of age.
  - All of the respondents said that it would cost them $5,000 and above to come into compliance with the requirement.
- Twenty-four respondents (34%) answered "no" to Question 1 of Part II.
  - Although they were instructed to skip Question 2 Part II if they answered "no" to the previous question, four of the respondents still indicated that they would incur expenses to comply with the provision.
- One respondent (1%) did not provide an answer to Question 1 of Part II.

The direct financial impact that will be borne by the pool facilities from this provision will derive from the repair or installation of diaper-changing stations. The cost among these establishments may differ depending on how many diaper-changing stations they need to meet the requirement. Additional costs may occur as a result of routine maintenance of diaper-changing stations. The indirect cost associated with coming into compliance with this proposed provision may occur through the time lost while installation or repairs are being made.

In determining the projected direct economic impact the facilities will sustain in the implementation of this provision, the highest end of each price range (Questions 2 of Part II) was multiplied by the number of affected swimming pools. This which was determined by the number of respondents for each range and its corresponding percentage to the total number of pool facilities. The cost is estimated to be $540,000 for diaper-changing stations (Table 2) based on the results of the survey.

Type of Swimming Pool	Respondents	No. of Swimming Pools	Financial Impact
Apartment/ Condominium	16 = (16/20) = 80% 1 = (1/20) = 5% 1 = (1/20) = 5% 2 = (2/20) = 10%	80% x 36 = 28.8 5% x 36 = 1.8 5% x 36 = 1.8 10% x 36 = 3.6	28.8 x $5,000 = $14,000 1.8 x $15,000 = $27,000 1.8 x $25,000 = $27,000 3.6 x $30,000 = $108,000
Community	0 = (0/0) = 0%	0% x 3 = 0	0 x $0 = 0
Homeowners' Association	6 = (6/10) = 60% 4 = (4/10) = 40%	60% x 12 = 7.2 40% x 12 = 4.8	7.2 x $5,000 = $36,000 4.8 x $10,000 = $48,000
Hotel/Motel	15 = (15/15) = 100%	100% x 47 = 47.0	47.0 x $5,000 = $235,000
Resort and Waterpark	1 = (1/1) = 100%	100% x 9 = 9.0	9 x $5,000 = $45,000
		TOTAL	**$540,000**

Table 2. Estimated financial impact to Guam's public swimming pools to implement the diaper-changing station provision of the proposed *Rules and Regulations for Public Swimming Pools*.

Part III. Chemical Storage Space

- Thirty-two of the 70 respondents (46%) revealed that they will not be able to comply with the proposed requirements.
    - The facilities that responded that they will not be able to comply with the provision further indicated that it would cost them $5,000 to $50,000 to meet this requirement.
    - One respondent said that it would cost them "other" amount not listed in the choices to effectuate the provision, but the respondent did not indicate a dollar amount.
- Thirty-five respondents (50%) answered "yes" to this question.
    - Three of the respondents stated that compliance would require the expenditure of resources.
- Three respondents did not provide an answer to Question 1 of Part III.

Based on the survey, half of the public swimming pools would be able to comply with the proposed requirement of a dedicated space for storage of chemicals, while the other half would not be able to comply. It has been a common observation by DEH officials during inspections that some facilities store their chemicals in the equipment room. If the proposal is adopted, the affected facilities may need to spend resources to build a suitable space for chemical storage that is separate from the equipment room.

In determining the projected direct economic impact the pool facilities will sustain in the implementation of this provision, the anticipated cost (Question 2 of Part III) was multiplied by the number of affected establishments. This was determined by the number of respondents for each range and its corresponding percentage of the total number of institutions. For the response of "other," the actual amount indicated was used in the calculation. As a result, it is estimated that the cost would be $1,068,500 based on the survey responses (Table 3).

Type of Swimming Pool	Respondents	No. of Swimming Pools	Financial Impact
Apartment/ Condominium	4 = (4/16) = 25% 11 = (11/16) = 69% 1 = (1/16) = 6%	25% x 36 = 9.0 69% x 36 = 24.8 6% x 36 = 2.2	9.0 x $5,000 = $45,000 24.8 x $10,000 = $248,000 2.2 x $50,000 = $110,000
Community	0 = (0/0) = 0%	0% x 3 = 0	0 x $0 = 0
Homeowners' Association	3 = (3/4) = 75% 1 = (1/4) = 25%	75% x 12 = 9.0 25% x 12 = 3.0	9.0 x $5,000 = $45,000 3.0 x $10,000 = $30,000
Hotel/Motel	4 = (4/13) = 31% 1 = (1/13) = 7.7% 6 = (6/13) = 46% 1 = (1/13) = 7.7% 1 = (1/13) = 7.7%	31% x 47 = 14.6 7.7% x 47 = 3.6 46% x 47 = 21.6 7.7% x 47 = 3.6 7.7% x 47 = 3.6	14.6 x $5,000 = $73,000 3.6 x $10,000 = $36,000 21.6 x $15,000 = $324,000 3.6 x $25,000 = $90,000 3.6 x $0 = $0
Resort and Waterpark	1 = (1/2) = 50% 1 = (1/2) = 50%	50% x 9 = 4.5 50% x 9 = 4.5	4.5 x $5,000 = $22,500 4.5 x $10,000 = $45,000
		TOTAL	**$1,068,500**

Table 3. Estimated financial impact to Guam's public swimming pools to implement the chemical storage space provision of the proposed *Rules and Regulations for Public Swimming Pools*.

Part IV. Qualified Operator

- Thirty-six respondents (51%) revealed that their facility does not fall under at least one of the six categories of swimming pools that would be required to hire a qualified operator based on the proposed regulations.
    - Five respondents that would not be required to get a qualified operator, based on their response to Question I of Part IV, still answered that they do not have a qualified operator.
- Twenty-six respondents (37%) said that they operate a swimming pool that would be required to have a qualified operator in accordance with the proposed regulations.
    - Sixteen respondents (62%) that would be required to have a qualified operator indicated that they do not have a qualified operator
    - Nine of these respondents (35%) revealed that they have a qualified operator.
    - One respondent whose swimming facility would require a qualified operator did not provide an answer to Question 2 of Part IV.
- Eight respondents (11%) did not provide an answer to Question I of Part IV.

Based on the results of the survey, about half of the public swimming pools would not fall under any of the categories that would require them to employ a qualified operator pursuant to the

proposed regulations. For those facilities that would be required, less than two-thirds would need to expend resources to effectuate this provision.

The proposed regulations would require a pool operator to possess a Certified Pool Operator (CPO) certification from the National Swimming Pool Foundation, or an equivalent credential determined by the Department. The cost of this training is currently $395 per applicant. Using this figure, DPHSS anticipates that the total financial impact of this provision to the industry is $17,775 (Table 4) based on the results of the survey.

Type of Swimming Pool	Respondents	No. of Swimming Pools	Financial Impact
Apartment/ Condominium	9 = (9/11) = 83%	82% x 3 = 30.0	30.0 x $395 = $11,850
Community	0 = (0/0) = 0%	0% x 3 = 0	0 x $0 = 0
Homeowners' Association	0 = (0/7) = 0%	0% x 12 = 0	0 x $395 = $0
Hotel/Motel	7 = (7/22) = 32%	32% x 47 =15.0	15.0 x $395 = $5,925
Resort and Waterpark	0 = (0/2) = 0%	0% x 9 = 0	0 x $395 = $0
		TOTAL	**$17,775**

Table 4. Estimated financial impact to Guam's public swimming pools to implement the qualified operator provision of the proposed *Rules and Regulations for Public Swimming Pools*.

Part V. Pool Maintenance

- Sixty-one respondents (87%) indicated that they expend resources for the cleaning, repair, and maintenance of the swimming pool systems and structures.
    - Fifty-eight respondents indicated that spend between $5,000 and $30,000 for the maintenance of their facility.
- Two respondents (3%) answered "no" to Question 1 of Part V.
- Seven respondents (10%) did not provide an answer to this question.

Using the results of the survey, DEH determined that most of the public swimming pools allocate resources for the maintenance of their facility on a yearly basis. The cost of pool maintenance, which is an existing requirement in the regulations, is not an added cost to the industry as the regulations have been in place for several decades.

Considering that the reported cost is a yearly expense and reflects all the public swimming pools, the direct financial impact of the existing requirements was calculated by multiplying the reported cost (Question 2 of Part V) by the number of affected swimming pools, which was determined by the number of respondents for each range and its corresponding percentage of the total number of facilities. As a result, it is estimated that the cost would be $1,583,000 based on the survey responses (Table 5).

Type of Swimming Pool	Respondents	No. of Swimming Pools	Financial Impact
Apartment/ Condominium	19 = (19/29) = 66% 3 = (3/29) = 10% 6 = (6/29) = 21% 1 = (1/29) = 3%	66% x 36 = 23.8 10% x 36 = 3.6 21% x 36 = 7.6 3% x 36 = 1.1	23.8 x $10,000 = $238,000 3.6 x $15,000 = $54,000 7.6 x $20,000 = $152,000 1.1 x $25,000 = $27,500
Community	0 = (0/0) = 0%	0% x 3 = 0	0 x $0 = 0
Homeowners' Association	1 = (1/11) = 9% 8= (8/11) = 73% 1 = (1/11) = 9% 1 = (1/11) = 9%	9% x 12 = 1.1 73% x 12 = 8.8 9% x 12 = 1.1 9% x 12 = 1.1	1.1 x $5,000 = $5,500 8.8 x $10,000 = $88,000 1.1 x $15,000 = $16,500 1.1 x $25,000 = $27,500
Hotel/Motel	1 = (1/17) = 5.9% 6 = (6/17) = 35% 2 = (2/17) = 12% 1 = (1/17) = 5.9% 1 = (1/17) = 5.9% 6 = (6/17) = 100%	5.9% x 47 = 2.8 35% x 47 = 16.5 12% x 47 = 5.6 5.9% x 47 = 2.8 5.9% x 47 = 2.8 35% x 47 = 16.5	2.8 x $5,000 = $14,000 16.5 x $10,000 = $165,000 5.6 x $15,000 = $84,000 2.8 x $20,000 = $56,000 2.8 x $25,000 = $70,000 16.5 x $30,000 = $495,000
Resort and Waterpark	1 = (1/1) = 100%	100% x 9 = 9.0	9 x $10,000 = $90,000
		TOTAL	**$1,583,000**

Table 5. Estimated financial impact to Guam's public swimming pools to implement the existing requirements of the proposed *Rules and Regulations 10for Public Swimming Pools*.

Part VI. Coming into Compliance

- Twenty-seven respondents (39%) indicated that they have existing structures or equipment that require modification, removal, or replacement to comply with the proposed regulations.
    - Twenty-five respondents who responded that they will not be able to comply with the existing requirements further indicated that they would need to expend between $5,000 and $100,000 to effectuate this provision.
    - Two respondents did not indicate how much it would cost them to come into compliance with the proposed regulations.
- Forty-one respondents (59%) answered "no" to Question 1 of Part VI.
- Two respondents (3%) did not provide an answer to this question.

Most of the swimming pool operators indicated that they would be able to comply with the other requirements in the proposed regulations based on the responses to the survey. For facilities that would need to incur expenses to meet the proposed requirements, DEH suspects that the cost would most likely result from the renovation of swimming pool facilities, such as repainting of depth markings, modification of landscape to allow for adequate lifeguard patron surveillance, installation of handrails, or construction of additional means of pool egress to meet the requirements.

The projected direct economic impact Guam's swimming pools will sustain in the implementation of this provision was determined by multiplying the anticipated cost (Question 2 of Part VI) with the number of affected facilities, which was determined by the number of respondents for each range and its corresponding percentage of the total number of public swimming pools. The median range was used in the calculation for the responses of "other" amount. As a result, it is estimated that the cost would be $3,102,000 (Table 6).

Type of Swimming Pool	Respondents	No. of Swimming Pools	Financial Impact
Apartment/ Condominium	3 = (3/10) = 30% 1 = (1/10) = 10% 1 = (1/10) = 10% 3 = (3/10) = 30% 2 = (2/10) = 20%	30% x 36 = 10.8 10% x 36 = 3.6 10% x 36 = 3.6 30% x 36 = 10.8 20% x 36 = 7.2	10.8 x $5,000 = $54,000 3.6 x $10,000 = $36,000 3.6 x $15,000 = $54,000 10.8 x $25,000 = $270,000 7.2 x $100,000 = $720,000
Community	0 = (0/0) = 0%	0% x 3 = 0	0 x $0 = 0
Homeowners' Association	1 = (1/1) = 100%	100% x 12 = 12.0	12.0 x $5,000 = $60,000
Hotel/Motel	3 = (3/13) = 23% 3 = (3/13) = 23% 1 = (1/13) = 7.7% 2 = (2/13) = 15% 4 = (4/13) = 31%	23% x 47 = 10.8 23% x 47 = 10.8 7.7% x 47 = 3.6 15% x 47 = 7.1 31% x 47 = 14.6	10.8 x $5,000 = $54,000 10.8 x $10,000 = $108,000 3.6 x $15,000 = $54,000 7.1 x $20,000 = $142,000 14.6 x $100,000 = $1,460,000
Resort and Waterpark	1 = (1/1) = 100%	100% x 9 = 9.0	9 x $10,000 = $90,000
		TOTAL	**$3,102,000**

Table 6. Estimated financial impact to Guam's public swimming pools to implement the other provisions of the proposed *Rules and Regulations for Public Swimming Pools*.

B. Total Financial Impact of the New Provisions

Among the five new provisions of the proposed *"Rules and Regulations for Public Swimming Pools"* evaluated in the survey, the barriers and enclosures provision appear likely to have the greatest financial impact to public swimming pools as 51% of the facilities will need to install fencing and gates. This was followed by the one-time cost of about $3,102,000 to comply with the other miscellaneous provisions and the one-time cost of about $1,068,500 to come into compliance with the chemical storage space provision. Complying with the diaper-changing station requirement will cost the swimming pools $540,000. Most swimming pools will be able to meet the proposed requirement for qualified operator; other facilities that do not have a qualified operator will need to expend about $17,775 to comply. Thus, this provision would have the least monetary impact.

The proposed regulations provide a two-year time frame from the date of its effectivity for all the existing swimming pool facilities to come into compliance with the provisions. This means that the total estimated direct financial impact of $7,923,775 is an expense that can be spread over a

two-year period for the affected swimming pools (Table 7). Furthermore, existing facilities with a valid Sanitary Permit from the Department prior to the adoption of the proposed regulations may apply for an exemption from some of the requirements, such as those relating to barriers and enclosure, pool surface and finish, and pool access and egress. If this cost is removed from the calculation, the actual financial impact to the industry may be significantly less than the anticipated cost.

Following the two-year transition period, and thereafter, the amount will be greatly reduced as the cost of installing the equipment or constructing the structures will no longer be applicable.

Total Direct Cost of Adopting the Rules and Regulations for Public Swimming Pools		
Requirement	Anticipated Cost	Comments
Barriers and Enclosures	$3,195,500	Barriers and enclosures, which may be constructed of any combination of building envelope, walls, or fencing not less than six feet in height would be required of public swimming pools to prevent unauthorized entry or break-ins. Furthermore, self-closing and self-latching gates or doors would need to be provided for unguarded swimming pool venues.
Diaper-Changing Stations	$540,000	The proposed regulations would require at least one diaper-changing station in each male and female restroom or a unisex diaper-changing station with an adjacent hand wash sink for swimming pools intended for use by diaper-aged children.
Chemical Storage Space	$1,068,500	Public swimming pools will be required to provide at least one space dedicated for the storage of chemicals, which shall be separate from the equipment room.
Qualified Operator	$17,775	Certain types of swimming pool will need to have a qualified pool operator on-site or immediately available within two hours during hours of operation. These facilities include those that have more than two swimming pools; have over 50,000 gallons of water; include features with recirculated water; used to provide swimming training; allow bather count of more than 200 bathers daily; and are operated by a municipality or school.
Coming into Compliance	$3,102,000	Additional provisions in the proposed regulations need to be met including swimming pool design and construction standards for pool depth markings; floors and walls, pool access and egress; lifeguard patron surveillance; and adequate lighting.
ANTICIPATED TOTAL DIRECT COST IN THE FIRST YEAR = $7,923,775		

Table 7. Financial impact of adopting the proposed *Rules and Regulations for Public Swimming Pools* based on the cost analyses of implementing the five new requirements that would likely have the greatest financial economic impact to the swimming pools.

C. Total Financial Impact of the Existing Provisions

The total direct financial impact to public swimming pools to comply with the existing requirements of the current regulations is $1,583,000 (Table 6), as estimated from the results of the survey. The provisions for cleaning, repair, and maintenance of public swimming pools have

been in existence since the adoption of the current regulations in 1980. Thus, this estimated cost is not an expense that is new to the establishments; instead, this is the approximated amount that the swimming pool operators have been spending on a yearly basis to maintain their facility.

Economic Burden of Recreational Water Illness, Drowning, and Injury

Swimming provides several desirable physical and health benefits, such as alleviating muscle and joint pain, reducing anxiety and depression, and fighting obesity. However, a swimming pool that is not properly maintained may harbor various hazards that could result in illness or injury to patrons and pool staff. The risk of exposure to these hazards is high, as people swim more than 301 million times each year in the U.S.[1] Drowning, gastrointestinal infections, as well as pool-chemical related injuries are some of the notable effects of hazards to bathers and pool staff that result in significant economic cost. The economic impact of other illnesses such as respiratory infections, skin rashes, and ear infections will not be discussed here but should be mentioned as they also bring about considerable economic costs to the community. The medical burden of these pool-related injuries and illnesses contribute to the indirect adverse impact to the island's economy that the proposed regulations aim to minimize.

As previously mentioned, there were 27,219 total infections associated with treated pool water reported by the CDC in 2018,[5] which is about 0.5% of the total yearly number of people who participate in swimming activity. CDC further reported that 89% of these infections were caused by the parasite *Cryptosporidium*. This chlorine-tolerant pathogen is commonly transmitted when swimmers ingest pool water that has been contaminated after a diarrheal event. No local cases of cryptosporidiosis have been reported on Guam; however, it is considered an emergent infection that is present worldwide and often undervalued due to limitations of appropriate diagnostic tools.[10] It usually causes long-lasting gastrointestinal illness and may even be life-threatening in immunocompromised individuals. The average medical and productivity costs of cryptosporidiosis was estimated to be about $2,800 per person based on a 1993 study conducted in Wisconsin.[11] Assuming that 239,000 locals and tourists swim each year on Guam, and 0.5% of these contract infections, about 1,063 people may become infected with cryptosporidiosis, which results to an estimated $2,976,400 yearly medical and productivity costs for this infection alone. Other common infections associated with public swimming pools and spas, such as those caused by *Legionella* and *Pseudomonas*, are difficult to quantify due to limited available data, but should be mentioned as they likewise result in significant economic burden to the community. By improving swimming pool operation and maintenance, and providing diaper-changing stations, as mandated by the proposed regulations, these infections may be minimized and the economic costs associated with them can be reduced.

Drowning is another public health event that may be associated with poorly maintained or operated swimming pools. The Consumer Product Safety Commission reported that there were about 7,300 pool- and spa-related emergency room visits in 2017, 73% of which involved children less than five years of age.[7] Drowning is associated with significant medical costs, especially if there are some brain or lung function damage involved. According to CDC's Web-based Injury Statistics Query and Reporting System (WISQARS), the average annual cost of hospitalization for unintentional drowning is $284,235.[12] No local data was found to estimate the number of pool-related drownings on Guam, which suggests that these incidents are likely underreported.

However, one drowning incident in a hotel pool was reported in 2017, where a toddler was later pronounced dead.[13]

Another pool-related health event that may impose economic burden to the community are those caused by improper handling and storage of chemicals. Burns, skin and respiratory irritations, as well as poisoning may all be caused by pool chemicals that are inadequately stored or inappropriately used. CDC reported that an estimated 4,876 persons required emergency room treatments for pool chemical injuries, which translates to a rate of 1.6 per 100,000 persons.[8] If this rate is applied to the total number of bathers on Guam, about four people may suffer from pool chemical-related injuries every year. The hospitalization cost for chemical burns in 2010 was $18,327, according a CPSC report.[14] This means that the annual economic burden of injuries caused by pool chemicals in Guam is about $73,308.

In total, the potential economic burden of pool-related infections, drowning, and chemical injuries in Guam is estimated to be about $3.9 million yearly. This potential economic burden can be offset by the implementation of the proposed *"Rules and Regulations for Public Swimming Pools"* if safeguards to protect the health and safety of bathers and pool staff are incorporated in the proposal. The proposed regulations require improvements in facility design, construction, and management, as well as pool operator training, which should reduce the number of pool-associated health events, and thus the economic burden.

III. Potential Increase or Decrease to Cost of Living or Price of Good or Service

The direct economic impact to public swimming pools from the adoption of the proposed *"Rules and Regulations for Public Swimming Pools"* is estimated to be $7,923,775 in the first two years of implementation, which equals to $3,086 a month per facility, and therefore, about $101 a day. After the two-year implementation period, the cost will significantly be reduced as only the cost for maintenance of the facilities will remain. Larger facilities may be able to readily absorb the increased cost without hardship. Even the smaller facilities should be able to handle the nominal cost increase since their actual expenses resulting from the adoption of the proposed regulations would be proportional to the size of their operation. The greatest cost impact of implementing the changes in the proposed regulations is the barriers and enclosures provision.

A reduction in the cost of living that may result from the adoption of the *"Rules and Regulations for Public Swimming Pools"* could be attributed to the decrease in the occurrence of injuries or the spread of infections caused by improved compliance inspections of these facilities. However, the confirmation of such consideration may require more thorough analysis.

IV. Direct or Indirect Impact on Employment

Adverse impact to employment is not expected if the proposed *"Rules and Regulations for Public Swimming Pools"* was to be adopted. The direct impact may occur from pool facilities needing to hire engineers, construction workers, pool operators, and additional staff to install, repair, manage, or maintain structures, fixtures, and pool systems. Indirect impact to employment could result from pools either increasing or decreasing hours of operation to make necessary changes.

V. Increase or Decrease in Cost of Business

Hotels and motels will be the primary entities that will experience increased cost of doing business from the adoption of the *"Rules and Regulations for Public Swimming Pools"* based on the results of the survey. The additional expenses they will bear will derive from the potential construction and repair of fences and gates, chemical storage spaces, and diaper-changing stations. Other expenses include the procurement of supplies, such as soap, paper towels, and pool chemicals. The expenses these facilities will incur will decrease after the two-year implementation period to come into compliance.

The implementation of the proposed regulations may also impact the swimming pools favorably from the prevention of possible litigation from parents and/or guardians who may seek to sue the facility from any illnesses or injuries that occur at their premises.

VI. Adverse or Beneficial Economic Impact

The adoption and implementation of the proposed *"Rules and Regulations for Public Swimming Pools"* will definitely have a financial impact on the establishments as swimming pools will be required to implement preventive measures in their operation and possibly install or replace one or more swimming pool structures. While these additional costs may be deemed as an adverse impact to the affected facility, the overall impact will be beneficial to the economy and the health of the population from the anticipated reduction in the number of injuries and illnesses in swimming pools and its associated economic burden. The vast majority of injuries and illnesses are both preventable and predictable, and increasing the level of prevention by implementing the proposed regulations will produce savings.

The anticipated reduction of illnesses and injuries in public swimming facilities, which is expected to occur from the implementation of the proposed *"Rules and Regulations for Public Swimming Pools"* should consequently reduce the economic burden these illnesses and injuries have on the island and its people. These cost benefits should outweigh the actual and imagined costs that the establishments may experience from the adoption of the proposed regulations. The anticipated annual implementation cost of the proposed regulations may be offset by medical savings from infections, drownings, and chemical injuries after two years of adoption.

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Telephone: (671) 477-7623 and 472-8062 Facsimile: (671) 472-1246

F. PHILIP CARBULLIDO
Chief Justice

GERALDINE AMPARO CEPEDA
Compiler of Laws

GUIDANCE FOR FORMATTING RULES AND REGULATIONS (GAR)

The Office of the Compiler of Laws is statutorily mandated to "[u]ndertake the publication of the continuing Administrative Rules and Regulations" of Guam. 1 GCA § 1602(c). The authority for the rule-making procedures of government of Guam agencies, departments, and other entities are set forth in Title 5, Guam Code Annotated, Chapter 9, Article 3, entitled "Rule-making Procedures." As part of this process, the rules are statutorily required to be "in a form approved by the Compiler of Laws." 5 GCA § 9303(a).

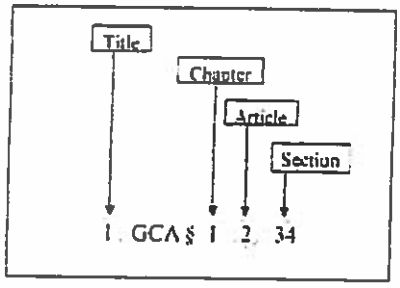
To assist government of Guam agencies, departments, and other entities, with the process of publishing submissions for including in the Guam Administrative Rules & Regulations (GAR), the Office of the Compiler of Laws has prepared this document to give guidance in the drafting process. It is strongly encouraged that those responsible for drafting rules and regulations review the recommendations and utilize the standard format herein, which was approved by the Guam Code Advisory Commission on June 21, 2005. Compliance with the recommended format will be de facto indication that that the submission is in a format approved by the Compiler of Laws.

Recommendation 1

Please compose GAR sections according to the diagram below. It is helpful to know that the GAR is divided into the following subdivisions in descending order:

Title (mandatory)
Division (if necessary)
Part (if necessary)
Chapter (mandatory)
Article (if necessary)
Section (mandatory)
Subsection (if necessary)

Note that Title, Chapter and Section designations are required for any codification scheme. Division, Part and Article designations are sometimes not used in particular codification schemes. We recommend that whenever possible, Article designations be used. The following diagram shows an example of the general codification scheme for the GCA, which similarly applies to the GAR:



Recommendation 2

Please draft GAR sections according the example below and identify subsections in the following format.

§ 1101. Name or Title of Section.

In the section title, the first letter of each major word is capitalized. Do not capitalize minor words such as conjunctions and articles (e.g. and, but, or, the, a, etc.). The text of the section should be written as shown in this example.

(a) First subsection. The first subsection (if any) is designated with small letters in parentheses.

(1) Second subsection. The second subsection (if any) is designated by Arabic numerals in parentheses.

(A) Third subsection. The third subsection (if any) is designated by large capital letters in parentheses.

(i) Fourth subsection. The fourth subsection (if any) is designated by small Roman numerals in parentheses.

(aa) Fifth subsection. If necessary, a fifth subsection is designated by double lower case letters in parentheses and the cycle repeats as follows.

(1) Sixth subsection.

(AA) Seventh subsection.

(i) Eighth subsection.

Recommendation 3

Please use Microsoft Word for creating new legislative documents. The Compiler's Office now uses Microsoft Word exclusively for processing the GAR. Legal publishers such as Lexis and West require transmittal of Word files. Use of MS Word will minimize glitches and errors caused by conversions of files created with other word processing software such as WordPerfect.

Recommendation 4
Please use Times New Roman font in documents. Times New Roman seems to be used universally and is a true-type font necessary for embedding in documents to be published. We use this font exclusively in all GAR documents.

Recommendation 5
When assigning a code section number to a new statutory addition and you are unsure of whether the desired code section number is vacant and available, please call our office.

Thank you for considering these recommendations. Please note that the suggestions herein are not necessarily hard and fast rules. There may be occasions requiring deviation from any standard formatting scheme. If you have any questions or comments, please do not hesitate to call my office.

GERALDINE A. CEPEDA

RULES AND REGULATIONS FOR PUBLIC SWIMMING POOLS

Article 6
26 Guam Administrative Rules and Regulations
Division 1
Chapter 4

PROPOSED

DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES
DIVISION OF ENVIRONMENTAL HEALTH
123 Chalan Kareta
Mangilao, Guam 96913-6304
(671) 735-7221

12.31.18

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§4601. Purpose.

The purpose of these rules and regulations is to repeal and replace existing rules and regulations of the Department of Public Health and Social Services that govern PUBLIC SWIMMING POOL sanitation for safeguarding public health and providing BATHERS a swimming environment that is safe and conducive to good health. The Model Aquatic Health Code was utilized in the development of these rules and regulations.

§4602. Authority.

Title 10 Guam Code Annotated (GCA), Chapter 21, Section 21102 authorizes the DIRECTOR of the Department of Public Health and Social Services to establish rules and regulations to carry out the provisions of Chapter 29, Title 10 GCA.

§4603. Title.

These rules and regulations shall be known as the *"Rules and Regulations for Public Swimming Pools."*

§4604. Definitions.

(a) *Agitated Water* means a PUBLIC SWIMMING POOL with mechanical means to discharge, spray, or move the water's surface above and/or below the static water line of the PUBLIC SWIMMING POOL. Where there is no static water line, movement shall be considered above the deck plane.

(b) *Backflow* means a hydraulic condition caused by a difference in water pressure that causes an undesirable reversal of the flow as the result of a higher pressure in the system than in its supply.

(c) *Barrier* means an obstacle intended to prevent direct access from one point to another.

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(d) *Bather* means a person at a PUBLIC SWIMMING POOL who has contact with water either through spray, or partial or total immersion. The term BATHER as defined, also includes staff members, and refers to those users who can be exposed to contaminated water, as well as potentially contaminate the water.

(e) *Chemical Storage Space* means a space in a PUBLIC SWIMMING POOL facility used for the STORAGE of POOL chemicals such as acids, salt, or corrosive or oxidizing chemicals.

(f) *Chlorine* means an element that at room temperature and pressure is a heavy greenish yellow gas with a characteristic penetrating and irritating smell; it is extremely toxic. It can be compressed in liquid form and stored in heavy steel tanks. When mixed with water, CHLORINE gas forms hypochlorous acid, the primary CHLORINE-based disinfecting agent, hypochlorite ion, and hydrochloric acid. Hypochlorous acid dissociation to hypochlorite ion is highly pH dependent. CHLORINE is a general term which refers to hypochlorous acid and hypochlorite ion in aqueous solution derived from CHLORINE gas or a variety of CHLORINE-based disinfecting agents.

(1) *Available Chlorine* means the amount of CHLORINE in the +1 oxidation state, which is the reactive, oxidized form. In contrast, chloride ion *(Cl^-)* is in the -1 oxidation state, which is the inert, reduced state. AVAILABLE CHLORINE is subdivided into Free Available CHLORINE and Combined Available CHLORINE. POOL chemicals containing AVAILABLE CHLORINE are both oxidizers and disinfectants. Elemental CHLORINE *(Cl_2)* is defined as containing 100% AVAILABLE CHLORINE. The concentration of AVAILABLE CHLORINE in water is normally reported as mg/L (ppm) "as Cl_2," that is, the concentration is measured on a Cl_2 basis, regardless of the source of the AVAILABLE CHLORINE.

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(2) *Combined Chlorine* means that portion of the total residual CHLORINE that is combined with ammonia or nitrogen compounds and will not react with undesirable or pathogenic organisms.

(3) *Free Chlorine Residual,* or *Free Available Chlorine (FAC),* means the portion of the total AVAILABLE CHLORINE that is not "combined chlorine" and is present as hypochlorous acid *(HOCl)* or hypochlorite ion *(OCl^-)*. The pH of the water determines the relative amounts of hypochlorous acid and hypochlorite ion. HOCl is a very effective bactericide and is the active bactericide in POOL water. OCl^- is also a bactericide, but acts more slowly than HOCl. Thus, CHLORINE is a more effective bactericide at low pH than at high pH. A FREE CHLORINE RESIDUAL must be maintained for adequate DISINFECTION.

(g) *Contaminant* means a substance that soils, stains, corrupts, or infects another substance by contact or association.

(h) *Critical Item* means a provision of this rules and regulations, that, if in noncompliance, is more likely than other violations to contribute to contamination, illness, or environmental health hazard.

(i) *Cross-Connection* means a connection or arrangement, physical or otherwise, between a potable water supply system and a PLUMBING FIXTURE, tank, receptor, equipment, or device, through which it may be possible for non-potable, used, unclean, polluted and contaminated water, or other substances to enter into a part of such potable water system under any condition.

(j) *CT Inactivation Value, or CT Value*, means a representation of the concentration of the disinfectant (C) multiplied by time in minutes (T) needed for inactivation of a particular CONTAMINANT. The concentration and time are inversely proportional; therefore, the higher the

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concentration of the disinfectant, the shorter the contact time required for inactivation. The CT VALUE can vary with pH or temperature change so these values must also be supplied to allow comparison between values.

(k) *Deck* means surface areas serving the PUBLIC SWIMMING POOL, including the dry DECK, perimeter/wet DECK, and POOL DECK.

(1) *Perimeter Deck* means the hardscape surface area immediately adjacent to and within four feet of the edge of the PUBLIC SWIMMING POOL; also known as the "wet deck" area.

(2) *Pool Deck* means the surface areas serving the PUBLIC SWIMMING POOL, beyond PERIMETER DECK, which is expected to be regularly trafficked and made wet by BATHERS.

(l) *Department* means the Guam Department of Public Health and Social Services.

(m) *Diaper-Changing Station* means a hygiene station that includes a diaper-changing unit, handwashing sink, soap and dispenser, a means for drying hands, trash receptacle, and disinfectant products to clean after use.

(n) *Diaper-Changing Unit* means a diaper-changing surface that is part of a DIAPER-CHANGING STATION.

(o) *Director* means the Director of the Department of Public Health and Social Services or his/her designated representative.

(p) *Disinfection* means a treatment that kills or irreversibly inactivates microorganisms (e.g., bacteria, viruses, and parasites); in water treatment, a chemical (commonly CHLORINE, chloramine, or ozone) or physical process (e.g., ultraviolet radiation) can be used.

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(q) *Enclosure* means an uninterrupted constructed feature or obstacle used to surround and secure an area that is intended to deter or effectively prevent unpermitted, uncontrolled, and unfettered access. It is designed to resist climbing and to prevent passage through it and under it.

(r) *Equipment Room* means a space intended for the operation of POOL pumps, filters, heaters, and controllers. This space is not intended for the STORAGE of hazardous POOL chemicals.

(s) *Flat Water* means a PUBLIC SWIMMING POOL in which the water line is static except for movement made by users.

(t) *Flume* means the riding channels of a WATERSLIDE which accommodate riders using or not using mats, tubes, rafts, and other transport vehicles as they slide along a path lubricated by a water flow.

(u) *Foot Bath* means standing water in which BATHERS or PUBLIC SWIMMING POOL staff rinse their feet.

(v) *Ground-Fault Circuit Interrupter or GFCI* means a device for protection of personnel that de-energizes an electrical circuit or portion thereof in the event of excessive ground current.

(w) *Handwashing Station* means a location which has a handwashing sink, adjacent soap with dispenser, hand drying device or paper towels and dispenser, and trash receptacle.

(x) *Hot Water* means a PUBLIC SWIMMING POOL with a water temperature over 90°F.

(y) *Hygiene Facility* means a structure or part of a structure that contains toilet, SHOWER, DIAPER-CHANGING UNIT, HANDWASHING STATION, and dressing capabilities serving BATHERS and PATRONS at a PUBLIC SWIMMING POOL.

(z) *Imminent Health Hazard* means a significant threat or danger to health that is considered to exist when there is evidence sufficient to show that a product, practice, circumstance,

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or event creates a situation that requires immediate correction or cessation of operation to prevent injury based on the number of potential injuries, and the nature, severity, and duration of the anticipated injury.

(aa) *Indoor Swimming Pool* means a physical place that contains one or more PUBLIC SWIMMING POOL and the surrounding BATHER and spectator/stadium seating areas within a structure that meets the definition of "Building" per the International Building Code. It does not include equipment, chemical STORAGE, or BATHER hygiene rooms or any other rooms with a direct opening to the PUBLIC SWIMMING POOL facility. Otherwise known as a natatorium.

(ab) *Inlet* means wall or floor fittings where treated water is returned to the POOL.

(ac) *Lazy River* means a channeled flow of water of near-constant depth in which the water is moved by pumps or other means of propulsion to provide a river-like flow that transports BATHERS over a defined path. A LAZY RIVER may include play features and devices. A LAZY RIVER may also be referred to as a tubing POOL, leisure river, leisure POOL, or a current channel.

(ad) *Oocyst* means the thick-walled, environmentally resistant structure released in the feces of infected animals that serves to transfer the infectious stages of sporozoan parasites (e.g., Cryptosporidium) to new hosts.

(ae) *Patron* means a BATHER or other person or occupant at a PUBLIC SWIMMING POOL who may or may not have contact with PUBLIC SWIMMING POOL water either through partial or total immersion. PATRONS may not have contact with PUBLIC SWIMMING POOL water, but could still be exposed to potential contamination from the PUBLIC SWIMMING POOL facility air, surfaces, or aerosols.

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(af) *Perimeter Gutter System, or Perimeter Overflow System (POS),* means the alternative to SKIMMERS as a method to remove water from the POOL's surface for treatment. The gutter provides a level structure along the POOL perimeter versus intermittent SKIMMERS.

(ag) *Person* means any person, firm, partnership, association, corporation, company, governmental agency, club or organization of any kind.

(ah) *pH* means the negative log of the concentration of hydrogen ions. When water ionizes, it produces hydrogen ions *(H^+)* and hydroxide ions *(OH^-)*. If there is an excess of hydrogen ions the water is acidic. If there is an excess of hydroxide ions the water is basic. pH ranges from 0 to 14. Pure water has a pH of 7.0. If pH is higher than 7.0, the water is said to be basic, or alkaline. If the water's pH is lower than 7.0, the water is acidic. As pH is raised, more ionization occurs and CHLORINE disinfectants decrease in effectiveness.

(ai) *Plumbing Fixture* means a receptacle, fixture, or device that is connected to a water supply system or discharges to a drainage system or both and may be used for the distribution and use of water; for example: toilets, urinals, SHOWERS, and hose bibs. Such receptacles, fixtures, or devices require a supply of water; or discharge liquid waste or liquid-borne solid waste; or require a supply of water and discharge waste to a drainage system.

(aj) *Public Swimming Pool* means any SWIMMING POOL that is available for public use, whether for a fee or free of charge, or any SWIMMING POOL used by any business, partnership, corporation or PERSON for the use of their customers, clients, guests or employees including, but not limited to: a commercial POOL; a community POOL or POOL at a hotel, motel, resort, auto park, trailer park, apartment house, or other multiple rental unit; private club; public club; and public or private school, gymnasium, or health establishment.

PROPOSED

(ak) *Qualified Lifeguard* means an individual who has successfully completed a lifeguard training course offered by a training agency recognized by the DEPARTMENT, holds a current certificate for such training, has met the pre-service requirements, and is participating in continuing in-service training requirements of the PUBLIC SWIMMING POOL facility.

(al) *Qualified Operator* means an individual responsible for the operation and maintenance of the water and air quality systems and the associated infrastructure of the PUBLIC SWIMMING POOL facility, and who has successfully completed a recognized operator training course to operate a PUBLIC SWIMMING POOL offered by a recognized training agency, and holds a current certificate for such training.

(am) *Recessed Steps* means a way of ingress/egress for a POOL similar to a ladder but the individual treads are recessed into the POOL wall.

(an) *Recirculation System* means the combination of the main drain, gutter or SKIMMER, INLETS, piping, pumps, controls, surge tank or balance tank to provide POOL water recirculation to and from the POOL and the treatment systems.

(ao) *Runout* means that part of a WATERSLIDE where riders are intended to decelerate and/or come to a stop. The RUNOUT is a continuation of the WATERSLIDE FLUME surface.

(ap) *Safety* (as it relates to construction items) means a design STANDARD intended to prevent inadvertent or hazardous operation or use (i.e., a passive engineering strategy).

(aq) *Sanitize* means reducing the level of microbes to that considered safe by public health STANDARDS (usually 99.999%). This may be achieved through a variety of chemical or physical means including chemical treatment, physical cleaning, or drying.

(ar) *Saturation Index* means a mathematical representation or scale representing the ability of water to deposit calcium carbonate, or dissolve metal, concrete or grout.

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(as) *Secondary Disinfection Systems* means those DISINFECTION processes or systems installed in addition to the STANDARD systems required on all PUBLIC SWIMMING POOLS, which are required to be used for increased risk PUBLIC SWIMMING POOLS.

(at) *Shower* means a device that sprays water on the body.

(1) *Cleansing Shower* means a SHOWER located within a HYGIENE FACILITY using warm water and soap. The purpose of these SHOWERS is to remove CONTAMINANTS including perianal fecal material, sweat, skin cells, personal care products, and dirt before BATHERS enter the PUBLIC SWIMMING POOL.

(2) *Rinse Shower* means a SHOWER typically located in the POOL DECK area with ambient temperature water. The main purpose is to remove dirt, sand, or organic material prior to entering the PUBLIC SWIMMING POOL to reduce the introduction of CONTAMINANTS and the formation of DISINFECTION by-products.

(au) *Skimmer* means a device installed in the POOL wall whose purpose is to remove floating debris and surface water to the filter. They shall include a weir to allow for the automatic adjustment to small changes in water level, maintaining skimming of the surface water.

(av) *Slide* means a PUBLIC SWIMMING POOL feature where users slide down from an elevated height into water.

(1) *Drop Slide* means a SLIDE that drops BATHERS into the water from a height above the water versus delivering the BATHER to the water entry point.

(2) *Pool Slide* means a SLIDE having a configuration as defined in The Code of Federal Regulations *(CFR)* Chapter II, Title 16, Part 1207 by CSPC, or is similar in construction to a playground slide used to allow users to slide from an elevated height to a

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POOL. They shall include children's (tot) SLIDES and all other non-FLUME SLIDES that are mounted on the POOL DECK or within the basin of a PUBLIC SWIMMING POOL.

(3) *Waterslide* means a SLIDE that runs into a LANDING POOL or RUNOUT through a fabricated channel with flowing water.

(aw) *Spa* means a structure intended for either warm or cold water where prolonged exposure is not intended. SPA structures are intended to be used for bathing or other recreational uses and are not usually drained and refilled after each use. It may include, but is not limited to, hydrotherapy, air induction bubbles, and recirculation.

(ax) *Standard* means something established by authority, custom, or general consent as a model or an example.

(ay) *Storage* means the condition of remaining in one space for one hour or more. Materials in a closed pipe or tube awaiting transfer to another location shall not be considered to be stored.

(az) *Substantial Alteration* means the alteration, modification, or renovation of a PUBLIC SWIMMING POOL where the total cost of the work exceeds 50% of the replacement cost of the PUBLIC SWIMMING POOL.

(ba) *Swimming Pool*, *or Pool,* means any artificial structure, basin, chamber, or tank constructed of impervious material used or intended to be used for swimming, diving, or recreational bathing. It does not include conventional bathtubs where the primary purpose is the cleaning of the body, or individual therapeutic tubs.

(1) *Diving Pool* means a PUBLIC SWIMMING POOL used exclusively for diving.

(2) *Landing Pool* means a PUBLIC SWIMMING POOL or designated section of a PUBLIC SWIMMING POOL located at the exit of one or more WATERSLIDE FLUMES. It is the

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body of water intended and designed to receive a BATHER emerging from the FLUME for the purpose of terminating the slide action and providing a means of exit to a DECK or walkway area.

(3) *Skimmer Pool* means a POOL using a SKIMMER system.

(4) *Surf Pool* means any POOL designed to generate waves dedicated to the activity of surfing on a surfboard or analogous surfing device commonly used in the ocean and intended for sport, as opposed to general play intent for WAVE POOLS.

(5) *Therapy Pool* means a POOL used exclusively for aquatic therapy, physical therapy, and/or rehabilitation to treat a diagnosed injury, illness, or medical condition, wherein the therapy is provided under the direct supervision of a licensed physical therapist, occupational therapist, or athletic trainer. This could include wound patients or immunocompromised patients whose health could be impacted if there is not additional water quality protection.

(6) *Wading Pool* means an artificial basin, chamber, or tank constructed of impervious material used, or intended to be used, for wading by small children and having a maximum depth not to exceed 18 inches at the deepest point and not more than 12 inches in depth at the side walls.

(7) *Wave Pool* means any POOL designed to simulate breaking or cyclic waves for purposes of general play. A WAVE POOL is not the same as a SURF POOL, which generates waves dedicated to the activity of surfing on a surfboard or analogous surfing device commonly used in the ocean and intended for sport as opposed to general play intent for WAVE POOLS.

PROPOSED

(bb) *Theoretical Peak Occupancy* means the anticipated peak number of BATHERS in a PUBLIC SWIMMING POOL, or the anticipated peak number of occupants of the DECKS of a PUBLIC SWIMMING POOL facility. This is the lower limit of peak occupancy to be used for design purposes for determining services that support occupants. THEORETICAL PEAK OCCUPANCY is used to determine the number of SHOWERS. For PUBLIC SWIMMING POOL, the THEORETICAL PEAK OCCUPANCY is calculated around the type of water use or space.

(bc) *Turnover, or Turnover Rate,* means the period of time, usually expressed in hours, required to circulate a volume of water equal to the capacity of the PUBLIC SWIMMING POOL.

(bd) *Variance* means a written document issued by the DIRECTOR, not his/her representative, that authorizes a modification or waiver of one or more requirements of these rules and regulations if, in the opinion of the DIRECTOR, a health hazard or nuisance will not result from the modification or waiver.

§4605. Scope.

These rules and regulations shall apply to all PUBLIC SWIMMING POOLS as defined herein, except private SWIMMING POOL maintained by an individual for the use of his family and friends.

These rules and regulations shall apply to all auxiliary structures and equipment thereof such as POOL DECKS, diving boards, locker rooms, SHOWER and dressing rooms, toilet facilities, and filtration, pumping, piping, disinfecting, and SAFETY equipment provided and maintained in connection with such facility.

§4606. Sanitary Permit.

(a) No PERSON shall directly or indirectly in any manner, conduct, control, manage, maintain, or operate a PUBLIC SWIMMING POOL unless a valid Sanitary Permit issued by the DEPARTMENT to operate such a facility has been obtained and posted. Any PERSON, before

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constructing a new PUBLIC SWIMMING POOL, or making SUBSTANTIAL ALTERATION of an existing facility shall first submit plans and specifications of such facility or changes to the DIRECTOR for approval.

(b) An application for a Sanitary Permit to operate all new or existing PUBLIC SWIMMING POOL shall be made in writing on a form prescribed by the DEPARTMENT, signed by the applicant or his authorized agent, and shall contain such information that will determine that the facility and its operation are in compliance with the applicable provisions of these rules and regulations.

(c) Before the application for a Sanitary Permit shall be approved, the DEPARTMENT shall verify that the facility meets the minimum sanitary requirements and STANDARDS by means of a pre-operational inspection. This shall include the access onto premises for assessment, inspection, and/or investigation.

(d) Before a pre-operational inspection is conducted, plans and specifications shall be submitted to the DIRECTOR in accordance with the requirements established in these rules and regulations, which shall include the following:

(1) Site information indicating, at a minimum, the location of all utilities, wells, topography, natural water features, and potential sources of surface drainage and pollution which may affect the proposed PUBLIC SWIMMING POOL;

(2) A plot plan including a general map and detailed scaled drawings of the PUBLIC SWIMMING POOL site plan or floor plan with detailed locations of each PUBLIC SWIMMING POOL and related features, and locations of all water supply facilities, sources of drinking water, public or private sewers and relative elevations of paved or

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other walkways and the EQUIPMENT ROOM floor with the elevations of storm and sanitary sewer inverts and street grade;

(3) Detailed scaled and dimensional drawings for each individual PUBLIC SWIMMING POOL showing the following:

(i) Location and type of INLETS, overflows, drains, suction outlets, overflow gutters or devices, piping, POOL water elevation, lighting, POOL markings, surface materials, and POOL features such as ladders, stairs, diving boards, SLIDES, and play features;

(ii) Location and type of DECK, curb, or walls enclosing the POOL, DECK drains, walkways, flooring, area finishes, entries and exits, hose bibs, fences, telephones, and area lighting;

(iii) A flow diagram showing the location, plan, elevation, and schematics of filters, pumps, chemical feeders and interlocks, chemical controllers and interlocks, supplementary DISINFECTION system, heaters, surge tanks, BACKFLOW prevention assemblies, valves, piping, flow meters, gauges, thermometers, test cocks, sight glasses, and drainage system;

(iv) A schematic layout of the EQUIPMENT ROOM showing accessibility for installation and maintenance, and CHEMICAL STORAGE SPACES;

(v) Location and number of HYGIENE FACILITIES provided including dressing rooms, lockers, SHOWERS, handwashing facilities, toilet fixtures, and DIAPER-CHANGING STATIONS; and

(vi) Layout for zones of PATRON surveillance as specified in §4637 (e) showing features or design configurations that can impact PATRON surveillance.

PROPOSED

§4607. Public Swimming Pool Design Standards and Construction.

(a) PUBLIC SWIMMING POOLS shall be constructed of reinforced concrete or impervious and structurally sound materials which provide a smooth, easily cleaned, watertight structure capable of withstanding the anticipated stresses for full and empty conditions.

(b) All materials shall be inert, non-toxic, resistant to corrosion, impervious, enduring, and resistant to damages related to the environmental conditions of Guam.

(c) All corners formed by intersection of walls and floors shall be rounded.

(d) Wood, sand, or earth are not permitted as an interior finish in PUBLIC SWIMMING POOL construction.

(e) A PUBLIC SWIMMING POOL and all associated structures thereto shall be so shaped and arranged that maintenance of safe and sanitary conditions, and recirculation of the water, are not impaired. An obstruction shall not extend into or above the PUBLIC SWIMMING POOL so as to create a SAFETY hazard.

(f) The finished surface of the PUBLIC SWIMMING POOL wall and floor shall be smooth, without cracks or open joints, non-slip, easily cleaned and light colored, except that a marking may be inserted against a light background.

(g) PUBLIC SWIMMING POOL floors in areas less than three feet deep, underwater benches, and all other floors and surfaces required to be slip-resistant shall have a minimum dynamic coefficient of friction at least equal to the requirements of ANSI A137.1-2012 of 0.42 as measured by the DCOF AcuTest.

(h) A hydrostatic relief valve and/or suitable under drain system shall be provided where the water table exerts hydrostatic pressure to uplift the PUBLIC SWIMMING POOL when empty or drained.

PROPOSED

(i) All vertical walls shall have a durable finish suitable for regular scrubbing and cleaning at the waterline. SKIMMER POOLS shall have a six-inch to 12-inch high waterline finish, and gutter or PERIMETER OVERFLOW SYSTEM shall have a minimum finish height of two inches.

(j) If dark colors are used for the POOL finish, these colors shall not extend more than 12 inches below the waterline.

(k) Except for special use POOLS, the slope of the floor for all POOLS with water depths under five feet shall not exceed one-foot vertical drop for every 12-feet horizontal, and shall not exceed one-foot vertical to three-feet horizontal for POOLS with water depths five foot and greater.

(l) Except as provided in (m) of this Section, floors and walls below the water line shall be white or light pastel in color such that from the POOL DECK a BATHER is visible on the POOL floor and the following items can be identified:

(1) Algae growth, debris or dirt within the POOL, and

(2) Cracks in the surface finish of the POOL, and

(3) Marker tiles defined in §4620.

(m) An exception for the color and finish requirement in (l) of this Section shall be made for the following PUBLIC SWIMMING POOL components:

(1) Competitive lane markings;

(2) Dedicated competitive diving well floors;

(3) Step or bench edge markings;

(4) POOLS shallower than 24 inches;

(5) Water line tiles;

(6) WAVE POOL and SURF POOL depth change indicator tiles; or

(7) Other designs approved by VARIANCE.

PROPOSED

(n) PUBLIC SWIMMING POOLS shall be free of recessed areas which will interfere with circulation of the water and with skimming action and SAFETY supervision of BATHERS.

(o) PERIMETER OVERFLOW GUTTERS and/or SKIMMERS meeting the requirements of §4613 and §4614 shall be required on all PUBLIC SWIMMING POOLS.

(p) Diving boards shall be permitted only when the diving envelope conforms to the STANDARDS of the certifying agency that regulates competitive diving at the PUBLIC SWIMMING POOL. If the PUBLIC SWIMMING POOL does not have competitive diving or certifying agency that regulates competitive diving, then the diving envelope shall conform to the diving envelope STANDARDS of Table 1, Table 2, Figure 1, and Figure 2. Starting platforms shall only be used for competitive swimming and training, and under the direct supervision of a coach or instructor. Starting platforms shall be removed, if possible, or prohibited from use during all recreational or non-competitive swimming activity by covering platforms with a manufacturer-supplied platform cover or with another means or device that is readily visible and clearly prohibits use.

Table 1. Diving Board Dimensions

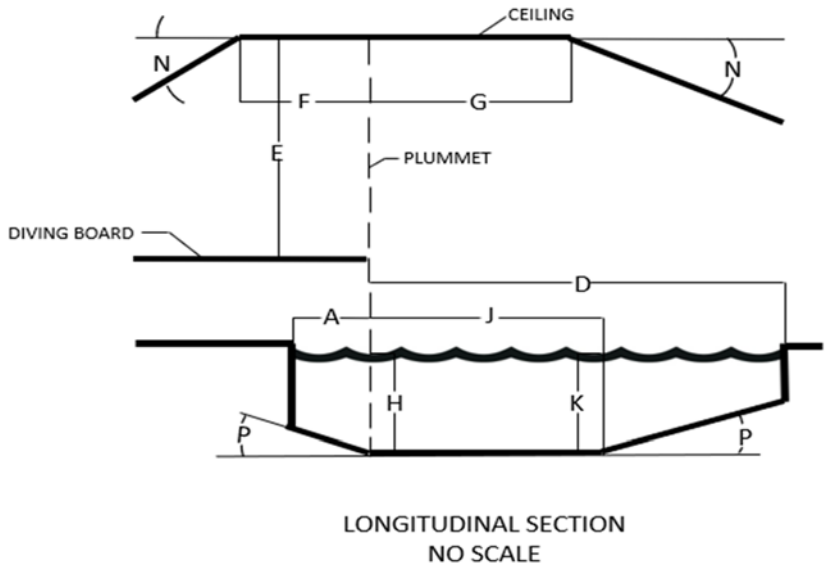
Board Height	1.64 ft.	2.46 ft.	3.28 ft.	3.84 ft.
Board Length	10.0 ft.	12.0 ft.	16.0 ft.	16.0 ft.
Board Width	20.0 in.	20.0 in.	20.0 in.	20.0 in.

PROPOSED

Table 2. Dimensions of Components Related to Diving Wells					
Letters below refer to Figures 1 & 2		Minimum Dimensions			
A	**Distance from plummet back to pool wall**	3.0 ft.	4.5 ft.	6.0 ft.	6.0 ft.
B	**Distance from plummet to pool wall at side**	10.0 ft.	10.0 ft.	10.0 ft.	11.5 ft.
C	**Distance from plummet to adjacent plummet**	8.83 ft.	8.83 ft.	8.83 ft.	8.54 ft.
D	**Distance from plummet to pool wall ahead**	26.0 ft.	27.83 ft.	29.58 ft.	33.67 ft.
E	**Height, board to ceiling at plummet & distances F and G**	16.0 ft.	16.0 ft.	16.0 ft.	16.0 ft.
F	**Clear overhead distance behind and each side of plummet**	8.0 ft.	8.0 ft.	8.0 ft.	8.0 ft.
G	**Clear overhead distance ahead of plummet**	16.0 ft.	16.0 ft.	16.0 ft.	16.0 ft.
H	**Depth of water at plummet**	9.5 ft.	10.75 ft.	12.0 ft.	12.5 ft.
J	**Distance ahead of plummet to depth K**	12.0 ft.	14.25 ft.	16.5 ft.	19.75 ft.
K	**Depth at distance J ahead of plummet**	8.75 ft.	10.0 ft.	11.28 ft.	12.17 ft.
L	**Distance at each side of plummet to depth M**	8.0 ft.	8.13 ft.	8.25 ft.	9.92 ft.
M	**Depth at distance L on each side of plummet**	9.08 ft.	10.33 ft.	11.63 ft.	12.17 ft.
N	**Maximum slope to reduce height E**	30°	30°	30°	30°
P	**Maximum floor slope to reduce depth ahead of K, to the sides of M, or back to pool wall behind H**	3:1	3:1	3:1	3:1

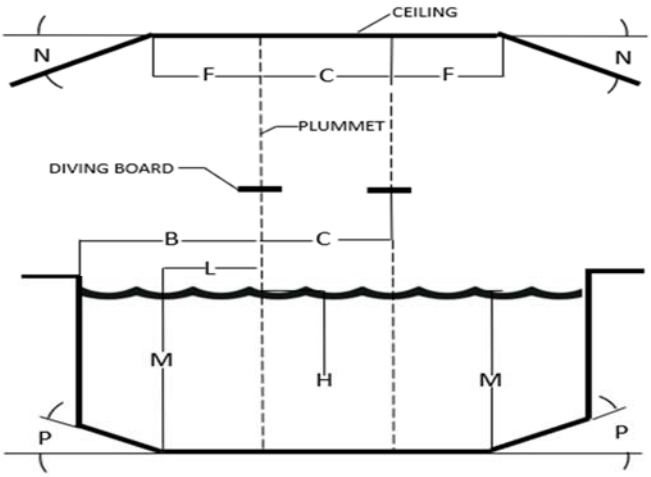
PROPOSED

Figure 1. Diving Platform Longitudinal Section



LONGITUDINAL SECTION
NO SCALE

Figure 2. Diving Platform Cross Section



CROSS SECTION
NO SCALE

(q) Where applicable, all equipment used, or proposed to be used, in PUBLIC SWIMMING POOLS shall be listed and labeled by an ANSI accredited certification organization, or have EPA registration, as applicable.

(r) At least one space dedicated to CHEMICAL STORAGE SPACE shall be provided to allow safe STORAGE of the chemicals present. An emergency eye wash station shall be provided in all CHEMICAL STORAGE SPACES. The CHEMICAL STORAGE SPACE shall be separate from the EQUIPMENT ROOM.

(s) It shall be the responsibility of the Sanitary Permit holder of the PUBLIC SWIMMING POOL to comply with all applicable codes (i.e., STANDARDS of Guam Fire Department and Guam Environmental Protection Agency) when storing chemicals necessary for maintenance purposes, operation, or sanitation of equipment in the EQUIPMENT ROOM.

(t) A carbon monoxide detector with local alarming, listed and labeled in accordance with UL 2075, shall be installed in all EQUIPMENT ROOMS and rooms adjacent to spaces containing fuel-burning equipment or vents carrying the products of combustion.

(u) Floors of an interior CHEMICAL STORAGE SPACE and EQUIPMENT ROOM shall be of concrete or other suitable material having a smooth, slip resistant finish that is easily cleanable. Openings or gaps on floors, walls, or ceilings shall be permanently sealed against air leakage.

(v) All doors opening into CHEMICAL STORAGE SPACES shall be equipped with permanent signage warning against unauthorized entry, and specifying the expected hazards and the location of the associated Safety Data Sheets. Doors shall be constructed of corrosion-resistant materials and automatic lock to prevent unauthorized entry.

PROPOSED

§4608. Water Supply.

(a) The water supply serving the PUBLIC SWIMMING POOL and all PLUMBING FIXTURES including drinking fountains, handwashing sinks, and SHOWERS shall come from an approved public water system.

(b) The water supply shall have sufficient capacity to simultaneously serve all PLUMBING FIXTURES.

(c) If a spill spout is used at a PUBLIC SWIMMING POOL, the fill spout shall be located so that it is not a SAFETY hazard to BATHERS. The open end of the fill spouts shall not have sharp edges or protrude more than two inches beyond the edge of the POOL. The open end shall be separated from the water by an air gap of at least 1 ½ pipe diameters measured from the pipe outlet to the POOL.

(d) The potable water supply serving a PUBLIC SWIMMING POOL shall be protected against BACKFLOW consisting of either of the following:

(1) An acceptable air gap consisting of a vertical distance of not less than two pipe diameters of the water supply pipe or six inches, whichever is greater, over the lowest free-flowing discharge point of the receiving pipe, tank, or vessel. Splash guards that are open to the atmosphere may be used around the air gap; or

(2) Where permitted, an approved reduced pressure zone BACKFLOW preventer installed according to the plumbing code and the DEPARTMENT.

§4609. Wastewater Disposal.

(a) The sewer system shall be adequate to serve all PLUMBING FIXTURES in the facility including the SHOWERS, toilets, and related structures.

PROPOSED

(b) There shall be no physical connection between the sewer system and any drain from the PUBLIC SWIMMING POOL or RECIRCULATION SYSTEM. Any PUBLIC SWIMMING POOL or gutter drain when discharged to the sewer system, storm drain, or other approved natural drainage course shall connect through a suitable air gap so as to preclude possibility of backup of sewage or waste into the PUBLIC SWIMMING POOL piping system.

(c) The sanitary sewer serving the PUBLIC SWIMMING POOL and auxiliary facilities shall discharge to the public sewer system wherever possible. Where no such sewer is available, the connection shall be made to a suitable disposal plant designed, constructed, and operated properly.

§4610. Depth Markings and Lines.

(a) Depth of water shall be plainly marked at or above the water surface on the vertical wall next to the PUBLIC SWIMMING POOL, at maximum and minimum depths, at the points of break between the deep and shallow portions, on both sides and at each end of the POOL, and spaced at not more than twenty-five feet intervals measured peripherally. In addition, for water less than five feet in depth, the depth shall be marked at one-foot depth intervals. The depth in the diving areas shall be appropriately marked.

(b) Depth markers shall be positioned to be read from within the POOL and while standing on the DECK facing the POOL. Depth markers shall be in numerals of four inches minimum height and a color contrasting with background.

(c) Depth markers shall be marked in units of feet and inches. Abbreviations of "FT" and "IN" may be used in lieu of "FEET" and "INCHES." Symbols for feet *(')* and inches *(")* shall not be permitted on water depth signs. Metric units may be provided in addition to – but not in lieu of – units of feet and inches.

PROPOSED

(d) Lane lines or other markings on the bottom of a POOL shall not exceed ten inches in width. Decorative designs on the bottom or walls which give the illusion of being or mistaken for the human form are prohibited.

(e) For POOL water depths five feet or shallower, all DECK depth markers required in these rules and regulations shall be provided with "NO DIVING" warning signs along with the universal international symbol for "NO DIVING."

(f) For POOLS deeper than five feet, a line of contrasting color, not less than two inches and not more than six inches in width, shall be clearly and permanently installed on the POOL floor at the shallow side of the break in the floor slope, and extend up the POOL walls to the waterline.

(g) One foot to the shallow water side of the break in floor slope and contrasting band, a SAFETY float rope shall extend across the POOL surface with the exception of WAVE POOLS, SURF POOLS, and WATERSLIDE LANDING POOLS.

§4611. Recirculation System.

(a) A RECIRCULATION SYSTEM consisting of one or more pumps, pipes, return INLETS, suction outlets, tanks, filters, water conditioning and DISINFECTION equipment, and other accessory equipment shall be provided to ensure effective distribution of treated water and maintain a uniform disinfectant residual and pH throughout the PUBLIC SWIMMING POOL.

(b) All PUBLIC SWIMMING POOLS shall comply with the maximum allowable TURNOVER times on Table 3 and Table 4.

Table 3. Turnover Times

Type of Public Swimming Pool	Turnover Maximum
Diving Pools	2 hours
Lazy River	2 hours
Plunge Pools	1 hour
Runout Slide	1 hour
Wading Pools	1 hour

PROPOSED

Wave Pools	2 hours
All Other Pools	6 hours

Table 4. Turnover Times for Spa and Therapy Pools		
Temperature	**Load**	**Turnover Maximum**
≤ 72°-93°F	> 2500 gals/person	4 hours or less
≤ 72°-93°F	> 450 gals/person	2 hours or less
≤ 72°-93°F	≤ 450 gals/person	1 hour or less
≥ 93-104 F	All	0.5 hours or less

(c) The TURNOVER time shall be calculated based on the total volume of water divided by the flow rate through the filtration process.

(d) For gutter or SKIMMER POOLS with main drains, the required recirculation flow shall be as follows during normal operation:

(1) At least 80% of the flow through the POS, and

(2) No greater than 20% through the main drain.

(e) RECIRCULATION SYSTEM piping shall be designed so that water velocities do not exceed eight feet per second on the discharge side of the recirculation pump and suction piping shall be sized so that the water velocity does not exceed six feet per second unless alternative values have proper engineering justification.

(f) Piping shall be of non-toxic material, resistant to corrosion, and able to withstand operating pressures, chemicals, and temperatures. Piping and piping system component materials shall be listed and labeled to NSF/ANSI Standard 14, NSF/ANSI Standard 50, and NSF/ANSI Standard 61, as applicable. All piping shall be clearly marked to indicate type or source of water and direction of flow with clear labeling and/or color coding.

(g) All valves shall be clearly identified with a brass tag, plastic laminate tags, or permanently affixed alternate.

PROPOSED

(h) All recirculation pumps shall meet the minimum Net Positive Suction Head requirement for the system. Pumps shall be of adequate capacity to provide the required number of TURNOVERS of PUBLIC SWIMMING POOL water as specified in (b) of this Section and whenever possible shall be so located as to eliminate the need for priming. If the pump or suction is located above the overflow level of the POOL, the pump shall be self-priming. The pump or pumps shall be capable of providing flow adequate for the back-washing of filters. Where vacuum filters are used, a vacuum limit switch shall be provided on the pump suction line. The vacuum limit switch shall be set for a maximum vacuum of 18 inches of mercury.

(i) The RECIRCULATION SYSTEM shall include a strainer or screen device on the suction side to prevent hair, lint, and foreign objects from reaching the pump and filters. Strainers shall be corrosion-resistant with openings not more than 1/8 inch in size, providing a free-flow area at least four times the area of the pump suction line, and shall be readily accessible and cleaned as necessary to maintain proper skimming. An extra strainer basket shall be provided with each strainer device to permit continuity of service.

(j) A cleaning system shall be provided to remove dirt from the bottom of the POOL. The cleaning system shall not create an entanglement or suction entrapment hazard or interfere with the operation or use of the PUBLIC SWIMMING POOL. Use of integral vacuum systems, meaning a vacuum system that uses the main circulating pump or a dedicated vacuum pump connect to the POOL with PVC piping and terminating at the POOL with a flush-mounted vacuum port fitting, shall be prohibited.

(k) A flow meter accurate within +/- 5% of the actual design flow shall be provided for each filtration system. Flow meters shall be listed and labeled to NSF/ANSI Standard 50 by an ANSI-accredited certification organization. When used with sand filters, the flow meter shall be

PROPOSED

located at a point so that the rate of the backwash will also be indicated. The flow meter shall be capable of measuring flows at least twenty percent over the design flow rate and shall be easy to read. Mercury manometers must be equipped with return wells to keep mercury from being blown out of the manometer.

(l) All components of the filtration and RECIRCULATION SYSTEMS shall be kept in continuous operation 24 hours per day. The system flow rate shall not be reduced more than 25% lower than the minimum design requirements and only reduced when the POOL is unoccupied.

§4612. Inlets and Outlets.

(a) Effective distribution of treated water shall be accomplished by either a continuous POS with integral INLETS or by means of directionally adjustable INLETS to facilitate circulation of the water and maintain a disinfectant residual as required by §4619 uniformly throughout the entire PUBLIC SWIMMING POOL.

(b) INLETS shall be hydraulically sized to provide the design flow rates for each POOL area of multi-zone POOLS based on the required design TURNOVER RATE for each zone.

(c) POOLS shall use wall and/or floor INLETS to provide adequate mixing. Wall INLETS shall be flushed against the POOL wall; submerged at least 24 inches below the water level; spaced no greater than 20 feet apart; placed within five feet of each corner of the POOL; placed at least five feet from a SKIMMER; and placed in each recessed or isolated area of the POOL. INLETS shall not protrude more than one and ¼ inches beyond the wall surface into the POOL and shall be rounded and smooth so as not to produce a SAFETY hazard.

(d) For POOLS greater than 50 feet wide, floor INLETS shall be required. Floor INLETS shall be flush with the bottom of the POOL; spaced no greater than 20 feet apart; row of INLETS

PROPOSED

located within 15 feet of each side wall; and spaced no greater than 25 feet from the nearest side walls when combined with wall INLETS.

(e) A minimum of two hydraulically balanced filtration system outlets are required in the bottom of all PUBLIC SWIMMING POOLS. The outlets shall be connected to a single main suction pipe by branch lines piped to provide hydraulic pressure balance between the drains. The branch lines shall not be valved so as to be capable of operating independently. Outlets shall be equally spaced from the POOL side walls and shall be located no less than three feet apart, measuring between the centerlines of the suction outlet covers. Suction outlets, including sumps and covers, shall be listed and labeled to the requirements of ANSI/APSP-16 2011. The bottom drain and recirculation outlets shall be covered with grates or other protective devices which cannot be removed except with tools. The slots or openings of these covers shall not exceed ½ inch in the smaller dimension.

§4613. Perimeter Overflow Gutters.

(a) PERIMETER OVERFLOW GUTTERS shall extend completely around the PUBLIC SWIMMING POOL, except at steps or recessed ladders. The overflow gutter may also serve as a step or a handhold, provided that the gutter is provided with a grating or cover and conforms to all construction and dimensional requirements herein specified.

(b) PERIMETER OVERFLOW GUTTERS shall be capable of continuously removing at least 125 percent of the approved total recirculation flow rate chosen by the designer.

(c) Gutter water shall be returned to the filter, or to waste, at the discretion of the POOL OPERATOR.

(d) All overflow gutters shall be connected to the RECIRCULATION SYSTEM through a properly designed surge tank. A vacuum gravity filter box may be used as a surge tank. The

PROPOSED

gutter system shall have an effective net surge capacity of at least one gallon per each square foot of POOL surface area. The surge tank's minimum, maximum, and normal POOL operating water levels shall be marked on the tank so as to be readily visible for inspection. Surge tanks shall have overflow pipes to convey excess water to waste via an air gap or other approved BACKFLOW prevention device.

(e) Gutters shall be level with a tolerance of +/- 1/16 of an inch around the perimeter of the PUBLIC SWIMMING POOL. The opening into the gutter beneath the coping shall not be less than four inches wide with a depth of at least three inches. Where large gutters are used, they shall be designed to prevent entrance or entrapment of BATHERS' arms and legs. The overflow edge or lip shall be rounded and not thicker than two and ½ inches. The overflow outlets shall be provided with outlet pipes which shall in any case be at least two inches in diameter.

(f) The outlet fittings shall have a clear opening in the grating of at least equal to one and ½ times the cross-sectional area of the outlet pipe. The outlet shall be spaced not more than three feet on centers in flat gutters. If the bottom of the gutter slopes is at least 1/3 of an inch per foot from a crown toward the outlet fittings, the outlets may be placed not over fifteen feet on the center. The use of continuous-flow gutters with single or multiple outlets will be acceptable provided they are properly designed for the POOL, self-cleansing, and capable of maintaining an effective skimming action without discharging back into the POOL.

(g) Nothing in this Section shall preclude the use of roll-out gutters or DECK-level type PUBLIC SWIMMING POOLS. Such designs shall conform to the general provisions relating to overflow rates. A curb, if used, shall be twelve inches wide and from three inches to six inches above the DECK. The gutter must be wide enough to provide safe footing.

(h) Gutters shall permit ready inspection, cleaning, and repair.

PROPOSED

§4614. Skimmers.

(a) SKIMMERS are permitted on PUBLIC SWIMMING POOLS which are not more than thirty feet wide and not more than 1,600 square feet, provided an approved handhold is installed completely around the POOL. SKIMMERS shall be installed in each corner, or in the coves of a free-form POOL, and at twenty to forty-foot intervals around the POOL perimeter. Handholds shall consist of bull-nosed coping not over two and ½ inches thick for the outer two inches or an equivalent approved handhold. The handholds must be no more than nine inches above the normal water line.

(b) The SKIMMER system shall be designed to handle up to 100% of the total recirculation flow rate chosen by the designer. SKIMMERS shall be so located as to provide effective skimming of the entire water surface and so as not to be affected by restricted flow in areas such as near steps and within small recesses.

(c) There shall be at least one such SKIMMER for each five hundred square feet of POOL surface area or fractional part thereof. Additional SKIMMERS may be required to achieve effective skimming under site-specific conditions and/or to comply with all applicable building codes.

(d) Hybrid systems that incorporate surge weirs in the overflow gutters to provide for in-POOL surge shall meet all of the requirements specified for overflow gutters (with the exception of the surge or balance tank, since the surge capacity requirement will be alternately met by the in-POOL surge capacity). The number of surge weirs shall be based on the individual surge weir capacity and the operational apportionment of the design recirculation flow rate.

(e) The flow rate for the SKIMMERS shall comply with manufacturer data plates or NSF/ANSI 50, including Annex K.

PROPOSED

(f) Each SKIMMER shall have a weir that adjusts automatically to variations in water level over a range of at least four inches.

(g) Each SKIMMER shall be equipped with a trimmer valve capable of distributing the total flow between individual SKIMMERS.

(h) The base of each SKIMMER shall be level with all other SKIMMERS in the POOL within a tolerance of +/- ¼ of an inch.

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

(j) The SKIMMER shall be constructed of sturdy, corrosion-resistant materials.

(k) There shall be some means of shutting off each SKIMMER.

§4615. Filter Requirements.

(a) General

(1) Filtration shall be required for all PUBLIC SWIMMING POOLS that recirculate water.

(2) The filter shall be designed, constructed, and operated so that structural or functional failures will not permit passage of unfiltered water.

(3) All filters shall be listed and labeled to NSF/ANSI 50 by an ANSI-accredited certification organization.

(4) All filters shall be so designed and installed with adequate clearance and facilities for ready and safe inspection, maintenance, disassembly, and repair.

(5) Filters should be used with the appropriate filter media as recommended by the filter manufacturer for maximum clarity and cycle length for PUBLIC SWIMMING POOL use. A means and access for easy removal of filter media shall be required.

PROPOSED

(b) Granular Media Filters

(1) The granular media filter system shall have valves and piping to allow isolation, venting, complete drainage (for maintenance or inspections), and backwashing of individual filters.

(2) Filtration accessories shall include with the influent and effluent pressure gauges, backwash sight glass or other means to view backwash water clarity, and-manual air relief system.

(3) High-rate granular media filters shall be designed to operate at no more than 15 gallons per minute per square foot when a minimum bed depth of 15 inches is provided per manufacturer. When a bed depth is less than 15 inches, filters shall be designed to operate at no more than 12 gallons per minute per square foot.

(4) The granular media filter system shall be designed to backwash each filter at a rate of at least 15 gallons per minute per square foot of filter bed surface area, unless explicitly prohibited by the filter manufacturer and approved at an alternate rate as specified in their NSF/ANSI 50 listing.

(5) The minimum depth of filter media cannot be less than the depth specified by the manufacturer.

(6) Influent and effluent pressure gauges shall have the capability to measure up to a 20 pounds per square inch increase in the differential pressure across the filter bed in increments of one pound per square inch or less.

(7) If coagulant feed systems are used, they shall be installed with the injection point located before the filters as far ahead as possible, with electrical interlocks in accordance with §4618 (b).

PROPOSED

(c) Precoat Filters

(1) The design filtration rate for vacuum precoat filters shall not be greater than either two gallons per minute per square foot or two and ½ gallons per minute per square foot when used with a continuous precoat media feed (commonly referred to as "body-feed").

(2) The design filtration rate for pressure precoat filters shall not be greater than two gallons per minute per square foot of effective filter surface area.

(3) The filtration surface area shall be based on the outside surface area of the media with the manufacturer's recommended thickness of precoat media and consistent with their NSF/ANSI 50 listing and labeling.

(4) The pre-coat process shall follow the manufacturer's recommendations and requirements of NSF/ANSI Standard 50.

(d) Cartridge Filters

(1) The design filtration rate for surface-type cartridge filter shall not exceed 0.30 gallons per minute per square foot.

(2) Filter cartridges shall be supplied and sized in accordance with the filter manufacturer's recommendation for PUBLIC SWIMMING POOL use.

(3) One complete set of spare cartridges shall be maintained on site in a clean and dry condition.

§4616. Pool Access and Egress.

(a) Each POOL shall have a minimum of two means of access and egress with the exception of WATERSLIDE LANDING POOLS, WATERSLIDE RUNOUTS, and WAVE POOLS.

PROPOSED

Acceptable means of access/egress shall include stairs/handrails, grab rails/RECESSED STEPS, ladders, ramps, swim outs, and zero-depth entries.

(b) If the POOL is over thirty feet wide, such means of access/egress shall be installed on each side of the POOL and shall be placed not more than 75 feet apart.

(c) Where provided, stairs shall be constructed with slip-resistant materials. The leading horizontal and vertical edges of stair treads shall be outlined with slip-resistant contrasting tile or other permanent marking of not less than one inch and not greater than two inches.

(d) Where stairs are provided in POOL ~~the~~ water depths greater than five feet, they shall be recessed into the side of the POOL, not protrude into the swimming area, and the lowest tread shall be not less than four feet below normal water elevation.

(e) Traditional rectangular stairs shall have a minimum uniform horizontal tread depth of 12 inches, and a minimum unobstructed tread width of 24 inches.

(f) Dimensions of stair treads for other types of stairs shall conform to the STANDARDS of Table 5, Figure 3, Figure 4, and Figure 5.

Table 5. Required Dimensions for Stairs, Treads, and Risers

Dimensions	T-1 Standard	T-1 Convex, Concave, Triangular	T-2	W-1	H-1
Minimum	12 inches	21 inches	12 inches	24 inches	6 inches
Maximum	18 inches	24 inches	16 inches	N/A	12 inches

PROPOSED

Figure 3. Stairs, Treads, and Risers

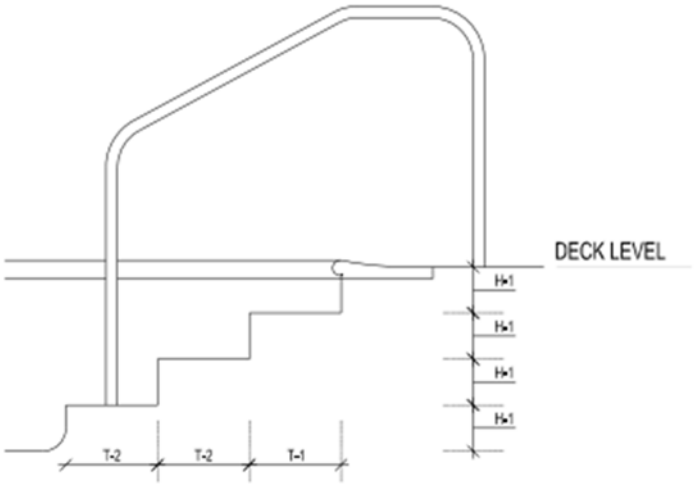


Figure 4. Stair Treads

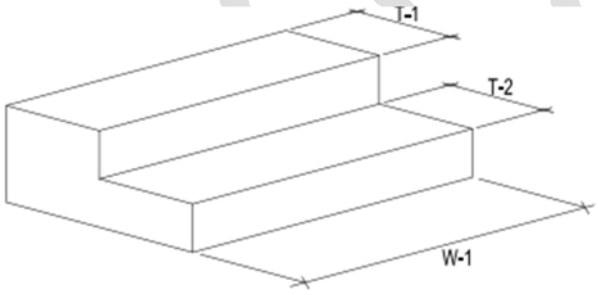
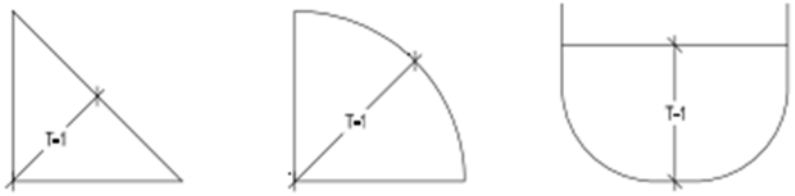


Figure 5. Unique Stair Treads



(g) The top surface of the uppermost stair tread shall be located not more than 12 inches below the POOL coping or DECK.

(h) Stair risers shall have a minimum uniform height of six inches and a maximum height of 12 inches, with a tolerance of ½ of an inch between adjacent risers.

(i) Stairs shall not be used underwater to transition between two sections of POOL of different depths.

(j) PUBLIC SWIMMING POOL ladders shall be corrosion-resistant and shall be anchored securely to the DECK. Ladders shall have two handrails with not less than 17 inches and not more than 24 inches horizontal clear space between them. Ladders and handrails shall be designed to resist a load of 50 pounds per linear foot applied in any direction and independently a single concentrated load of 200 pounds applied in any direction at any location. The upper railing surface of handrails shall extend above the POOL coping or DECK a minimum of 28 inches. The clear space between handrails and the POOL wall shall be not less than three inches and not more than six inches.

(k) Ladder treads shall be slip-resistant and shall have a minimum horizontal tread depth of 1 and ½ inches. The distance between the horizontal tread and POOL wall shall not be greater than four inches. Ladder treads shall be uniformly spaced not less than seven inches and not more than 12 inches vertically at the handrails. The top surface of the upmost ladder tread shall be located not more than 12 inches below the POOL coping, gutter, or DECK.

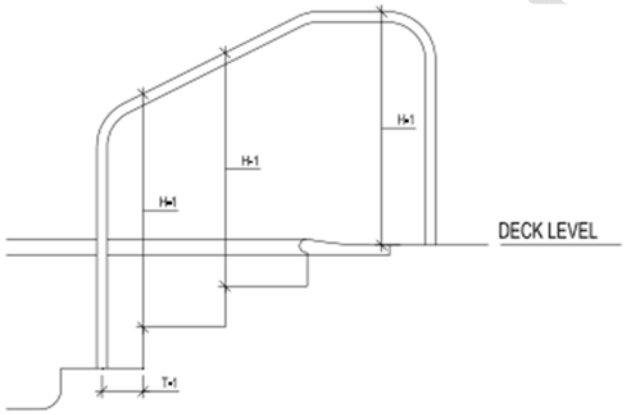
(l) Stairs wider than five feet shall have at least one additional handrail for every 12 feet of stair width.

(m) Dimensions of handrails shall conform to the STANDARDS of Table 6 and Figure 6.

PROPOSED

Table 6. Stair Handrail Dimensions		
Dimensions	T-1	H-1
Minimum	3 inches	34 inches
Maximum	N/A	38 inches

Figure 6. Stair Handrails



(n) RECESSED STEPS shall be slip-resistant, easily cleanable, shall drain into the POOL, and dimensions shall conform to the STANDARDS of Table 7, Figure 7, and Figure 8.

Table 7. Recessed Steps Dimensions				
Dimensions	H-1	H-2	W-1	D-1
Minimum	6 inches	5 inches	12 inches	5 inches
Maximum	12 inches	N/A	N/A	N/A

Figure 7. Recessed Steps Dimensions

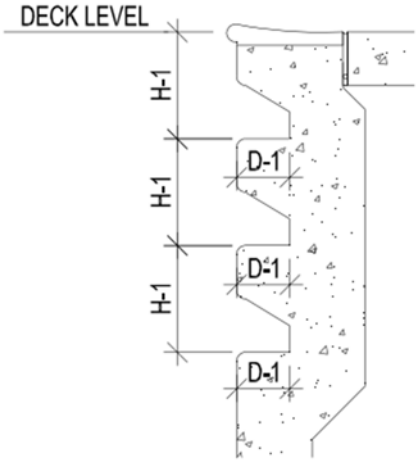
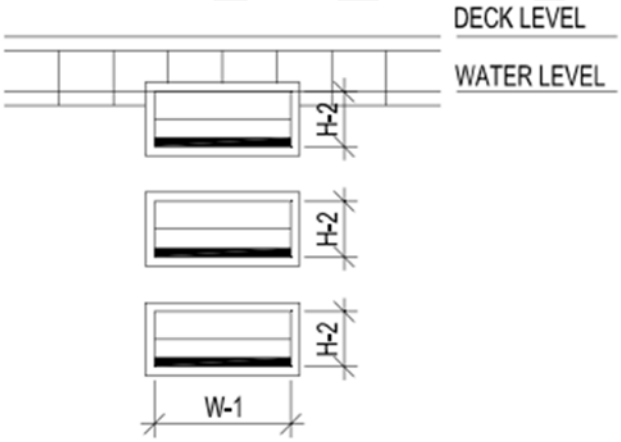


Figure 8. Recessed Steps Dimensions



§4617. Decks and Walkways.

(a) A continuous DECK with at least four feet of clearance from the POOL edge to fencing or other obstruction shall be provided to allow for QUALIFIED LIFEGUARD transit, roaming, or change of positioning to maximize viewing of the zone of BATHER surveillance as well as execution of water extrication. All DECK edges shall be beveled, rounded, or otherwise relieved to eliminate sharp corners. The DECK area shall be impervious and easily cleanable.

(b) The surface of the paved walk or DECK shall not drain into the PUBLIC SWIMMING POOL, RECIRCULATION SYSTEMS, or the overflow gutter. Drainage shall be conducted away from the POOL area in a manner that will not create muddy, hazardous, or objectionable conditions. DECKS shall be sloped away from the POOL and in accordance with Table 8.

Table 8. Minimum Slopes for Drainage	
Surface	Minimum Slope
Smooth finishes; such as tile, hand-finished concrete & lightly-broomed concrete	1/8 inch per foot
Moderately textured finishes; such as exposed aggregate or medium-broomed concrete	1/4 inch per foot
Heavily textured finishes; such as brick (where permitted)	3/8 inch per foot

§4618. Chemical Control.

(a) DISINFECTION and pH control chemicals shall be automatically introduced through the RECIRCULATION SYSTEM. A chemical controller, as specified in this Section shall be provided and used for monitoring and control of disinfectant and pH feed equipment. DISINFECTION and pH control chemicals shall be added using a feeder that meets the requirements outlined in this Section.

(b) The POOL shall be equipped with chemical feed equipment such as flow-through chemical feeders, electrolytic chemical generators, mechanical chemical feeders, chemical feed pumps, and automated controllers that are listed and labeled to NSF ANSI 50 by an ANSI-accredited certification organization. Flow-through chemical feeders shall only be used with the chemical (formulation, brand, size, and shape) specified by the chemical feeder manufacturer. All

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chemical feeders shall be provided with an automatic means to be disabled through an electrical interlock with at least two of the following:

(1) Recirculation pump power,

(2) Flow meter/flow switch in the return line,

(3) Chemical control power and paddle wheel or flow cell on the chemical controller if SAFETY test confirms feed systems are disabled through the controller when the pump is turned off, loses prime, or filters are backwashed.

(c) Feeders shall be capable of supplying disinfectant and pH control chemicals to the PUBLIC SWIMMING POOL to maintain the minimum required DISINFECTION levels at all times in accordance with these rules and regulations. All CHLORINE dosing and generating equipment, including erosion feeders, or in line electrolytic and brine/batch generators, shall be designed with a capacity to provide 4.0 lbs of FREE AVAILABLE CHLORINE (FAC)/day/10,000 gal of POOL water for outdoor PUBLIC SWIMMING POOLS, or 2.5 lbs FAC/day/10,000 gal of POOL water for INDOOR SWIMMING POOLS at a minimum.

(d) The injection point of DISINFECTION chemicals shall be located below any pH control chemical injection point with sufficient physical separation of the injection points to reduce the likelihood of mixing of these chemicals in the piping during periods of interruption of RECIRCULATION SYSTEM FLOW. Means of injection shall not allow BACKFLOW into the chemical system from the POOL system. Coagulants shall be metered and injected through a pump system prior to the filters per the manufacturer's recommended rate.

(e) Automated controllers shall be installed for monitoring and turning on or off chemical feeders used for pH and disinfectants at all PUBLIC SWIMMING POOLS. Operation manuals or other instructions that give clear directions for cleaning and calibrating automated

PROPOSED

controller probes and sensors shall be provided in close proximity to the automated controller. A set point shall be used to target the disinfectant level and the pH level.

(f) Equipment and piping used to apply chemicals to the water shall be of such size, design, and material that they may be cleaned and will be free from clogging. All material used for such equipment and piping shall be resistant to action of chemicals to be used therein.

§4619. Disinfection and Water Quality.

(a) PUBLIC SWIMMING POOLS when in use shall be continuously disinfected by a chemical which imparts a residual effect. Only products that are EPA-registered for use as sanitizers or disinfectants in PUBLIC SWIMMING POOLS shall be permitted.

(b) When CHLORINE is used, PUBLIC SWIMMING POOLS not using cyanuric acid (CYA), shall maintain a minimum FAC concentration of 1.0 ppm, and POOLS using CYA shall maintain a minimum FAC concentration of 2.0 ppm. SPAS shall maintain a minimum FAC concentration of 3.0 ppm. Maximum FAC concentrations shall not exceed 10.0 ppm at any time the PUBLIC SWIMMING POOL is open to BATHERS.

(c) If used, CYA levels shall not exceed 90 ppm. Use of CYA or stabilized CHLORINE products shall be prohibited for new construction, SUBSTANTIAL ALTERATION, or DISINFECTION equipment replacements in SPAS and THERAPY POOLS after the effective date of these rules and regulations.

(d) Bromine-based disinfectants may be applied to PUBLIC SWIMMING POOLS through the addition of an organic bromine compound (1,3-Dibromo-5,5-dimethylhydantoin (DBDMH) or 1-bromo-3-chloro-5,5-dimethylhydantoin (BCDMH)). Minimum bromine concentrations of 4.0 ppm shall be maintained at all times in SPAS, and 3.0 ppm shall be maintained at all times in all

PROPOSED

other PUBLIC SWIMMING POOLS. The maximum bromine concentration shall not exceed 8.0 ppm at any time the PUBLIC SWIMMING POOL is open to BATHERS.

(e) Use of compressed CHLORINE gas shall be prohibited for new construction and after SUBSTANTIAL ALTERATION to existing PUBLIC SWIMMING POOLS. For existing facilities using CHLORINE gas, the following additional features shall be provided:

(1) The CHLORINE and chlorinating equipment shall be in a separate room with a shatter-proof ventilation system capable of 60 air changes per hour. Such rooms shall not be below ground level and shall be provided with a shatter-proof gas-tight inspection window. The door of the room shall not open to the PUBLIC SWIMMING POOL, and shall open to the exterior of the building or structure.

(2) The chlorinator equipment shall be of rugged design capable of withstanding wear without developing leaks.

(3) CHLORINE cylinders shall be anchored to prevent their falling over. A valve-stem wrench shall be maintained on the CHLORINE cylinders in use so the supply can be shut off quickly in the case of an emergency.

(4) The CHLORINE feeding device shall be designed so that during accidents or interruptions of the water supply, leaking CHLORINE gas will be conducted to the out-of-doors.

(5) The chlorinator shall be a solution feed-type capable of delivering CHLORINE at its maximum rate without releasing CHLORINE gas to the atmosphere.

(6) The chlorinators shall be designed to prevent the BACKFLOW of water into the CHLORINE solution container.

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(7) Personal protective equipment, consisting of at least a gas mask designed for use in a CHLORINE atmosphere and of a type approved by the National Institute for Occupational Safety and Health (NIOSH) shall be stored directly outside one entrance of the room in which the chlorinator is maintained. In addition, a replacement canister shall be provided and a record shall be kept of gas mask usage to ensure that the mask will be serviceable when needed.

(8) A minimum of two self-contained breathing apparatus (SCBA) systems shall be on hand at all times and two QUALIFIED OPERATORS are to be involved in the changing of the tanks. One of the QUALIFIED OPERATORS should be stationed outside of the chemical room where the QUALIFIED OPERATOR inside can be seen at all times.

(9) An emergency direct line telephone shall be located by the door.

(f) Other sanitizers and disinfectants are acceptable when they are demonstrated to provide a readily measurable residual. Such sanitizers and disinfectants shall not create a hazardous condition or compromise disinfectant efficacy when used with required bromine and CHLORINE concentrations and not interfere with water quality measures meeting all criteria set forth in these rules and regulations.

(g) The PUBLIC SWIMMING POOL water shall be maintained in an alkaline condition as indicated by pH of not less than 7.2 and not over 7.8. A pH testing kit accurate to the nearest 0.2 pH unit shall be provided at each PUBLIC SWIMMING POOL.

(h) PUBLIC SWIMMING POOL water shall be chemically balanced. Total alkalinity shall be maintained in the range of 60-180 ppm. Calcium hardness shall not exceed 1,000 ppm. When the level of combined CHLORINE (chloramines) exceeds 0.4 ppm, actions shall be taken by the operator to reduce this level. Such actions shall include but are not limited to superchlorination,

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water exchange, or PATRON adherence to appropriate BATHER hygiene practices. EPA-registered algaecides may be used provided that the product is labeled as an algaecide for PUBLIC SWIMMING POOL use and the product is used in strict compliance with label instructions.

(i) A water quality testing kit for measuring the concentration of the disinfectant residual, pH, alkalinity, CYA (if used), and temperature, certified to NSF/ANSI 50 by an ANSI-accredited certification organization, shall be provided at each POOL. FAC, combined AVAILABLE CHLORINE (CAC), or total bromine (TB), and pH shall be tested at all PUBLIC SWIMMING POOLS prior to opening each day. For all PUBLIC SWIMMING POOLS using an automated disinfectant feed system, FAC (or TB) and pH shall be tested every four hours while open to the public. PUBLIC SWIMMING POOLS using a manual disinfectant feed system that delivers disinfectant via a flow through erosion feeder or metering pump without an automated controller, FAC or bromine and pH shall be tested every two hours while open to the public. Total alkalinity shall be tested weekly. Total dissolved solids shall be tested quarterly. Calcium hardness and SATURATION INDEX shall be tested monthly. If used, CYA shall be tested 24 hours after the addition of CYA and monthly thereafter. If PUBLIC SWIMMING POOLS use stabilized CHLORINE as its primary disinfectant, the operator shall test CYA every two weeks.

(j) The maximum temperature for PUBLIC SWIMMING POOLS shall be 104°F.

(k) The new construction or SUBSTANTIAL ALTERATION of PUBLIC SWIMMING POOLS designed primarily for children under 5 years old, such as WADING POOLS, and THERAPY POOLS shall be required to use a SECONDARY DISINFECTION SYSTEM within one year of the effective date of these rules and regulations:

PROPOSED

(1) SECONDARY DISINFECTION SYSTEMS shall be designed to achieve a minimum 3-log (99.9%) reduction in the number of infective *Cryptosporidium parvum* OOCYSTS per pass through the SECONDARY DISINFECTION SYSTEM.

(2) The SECONDARY DISINFECTION SYSTEM shall be located in the treatment loop (post filtration) and treat a portion (up to 100%) of the filtration flow prior to return of the water to the PUBLIC SWIMMING POOL.

(l) Removal of water from the POOL and replacement with make-up water shall be performed as needed to maintain water quality. A volume of water totaling at least four gallons per BATHER per day per PUBLIC SWIMMING POOL shall be discharged from the system or treated with an alternate system approved by the DEPARTMENT and reused.

§4620. Water Clarity.

The water in a PUBLIC SWIMMING POOL shall be sufficiently clear such that the bottom is visible while the water is static. To make this observation, a four-inch by four-inch marker tile in contrasting color to the POOL floor or main suction outlet shall be located at the deepest part of the POOL. For POOLS over 10 feet deep, an eight by eight-inch square marker tile, shall be used as a reference point. Such reference point shall be visible at all times at any point on the DECK up to 30 feet away in a direct line of sight from the tile or main drain.

§4621. Electrical Requirements.

Nothing in these rules and regulations shall be construed as providing relief from any applicable requirements of the National Electrical Code (NEC) or other applicable code.

(a) INDOOR SWIMMING POOLS and CHEMICAL STORAGE SPACES shall be considered wet and corrosive environments.

PROPOSED

(b) Electrical conduit, devices or equipment shall not enter, pass through, or occupy an interior CHEMICAL STORAGE SPACE, except as required to service devices integral to the function of the room, such as pumps, vessels, controls, or lighting and SAFETY devices, if allowed by the local electrical code.

(c) Lamps, including fluorescent tubes, installed in interior CHEMICAL STORAGE SPACES shall be protected against breakage with a lens or other cover, or be otherwise protected against the accidental release of hot materials.

§4622. Lighting Requirements.

Lighting as described in this Section shall be provided for all outdoor PUBLIC SWIMMING POOLS open for use from 30 minutes before sunset to 30 minutes after sunrise, or during periods of natural illumination below the levels required in this Section.

(a) EQUIPMENT ROOMS and INDOOR SWIMMING POOL water surface shall be lighted to provide a minimum of 30 horizontal foot candles of illumination. Outdoor water surface and DECK shall have a minimum maintained light level of ten horizontal foot candles of illumination.

(b) Where outdoor POOLS are open for use for night swimming, or during periods of low illumination, underwater lighting may be excluded where maintained POOL surface lighting levels are a minimum of 15 horizontal foot candles, and all portions of the POOL, including the bottom and drain(s), are readily visible as required in §4620.

(c) Where underwater lighting is used, not less than 0.5 watts shall be employed per square foot of PUBLIC SWIMMING POOL water surface area. Such lights shall be spaced to provide illumination so that all portions of the POOL, including the bottom and drain(s), may be seen readily without glare. Dimmable lighting shall not be used for underwater lighting.

PROPOSED

(d) When underwater POOL lighting fixtures are provided, they shall be installed so as not to create a SAFETY hazard to BATHERS. Branch circuits that supply underwater lights operating at more than the Low Voltage Contact Limit as defined in NEC 680.2 must be GROUND-FAULT CIRCUIT INTERRUPTER (GFCI) protected. The top of lens of the underwater lighting fixtures should be at least eighteen inches below water level of POOL. Lighting shall be such that lifeguards may see every part of the PUBLIC SWIMMING POOL, all diving boards, or other appurtenances, without being blinded by the light. Lights, appliances, and wiring shall be installed and grounded in accordance with the local electrical code. Overhead electrical wiring shall be designed and located so that wires cannot possibly fall on the PUBLIC SWIMMING POOL ENCLOSURES.

(e) No lighting controls shall be accessible to PATRONS or BATHERS.

(f) Outdoor POOLS, or POOLS with adequate natural light that are intended for daylight use only, shall prominently post signs which are legible at all entrances and which state that swimming after dark is not permitted in accordance with these rules and regulations.

§4623. Ventilation Requirements.

All INDOOR SWIMMING POOLS, SHOWER facilities, dressing rooms, toilet spaces, CHEMICAL STORAGE SPACES, and mechanical rooms shall be adequately ventilated either by natural or mechanical means and shall comply with ASHRAE Standard 62.1 2013, *Ventilation for Acceptable Indoor Air Quality*.

§4624. Theoretical Peak Occupancy.

(a) The THEORETICAL PEAK OCCUPANCY for a PUBLIC SWIMMING POOL shall be used for designing systems that serve BATHERS and PATRONS, and shall incorporate non-water related

PROPOSED

areas such as DECKS and other adjacent portions of the PUBLIC SWIMMING POOL not associated with the PUBLIC SWIMMING POOL.

(b) The THEORETICAL PEAK OCCUPANCY shall be calculated by dividing the surface area in square feet of the PUBLIC SWIMMING POOL by the density factor (D) that fits the specific PUBLIC SWIMMING POOL being considered.

THEORETICAL PEAK OCCUPANCY = PUBLIC SWIMMING POOL Surface Area / D

The density factors (D) are:

Water/BATHER-related:

(1) FLAT WATER density factor = 20 sq. ft. per BATHER

(2) AGITATED WATER density factor = 15 sq. ft. per BATHER

(3) HOT WATER density factor = 10 sq. ft. per BATHER

(4) WATERSLIDE LANDING POOL density factor = manufacturer-established capacity at any given time.

(5) Interactive water play water density factor = 10 sq. ft. per BATHER on surface.

(6) SURF POOL density factor = manufacturer-established capacity at any given time.

Non-water/PATRON-related:

(7) DECK density factor = 50 sq. ft. per BATHER.

(8) Stadium seating density factor = 6.6 sq. ft. per BATHER

(c) The density factors in (b) of this Section may be modified for higher BATHER or PATRON density, but they shall not be modified to result in less BATHERS per square foot than listed.

PROPOSED

(d) The THEORETICAL PEAK OCCUPANCY shall be determined by adding the calculations for each PUBLIC SWIMMING POOL in the facility

§4625. Hygiene Facilities Requirements.

(a) A PUBLIC SWIMMING POOL designed primarily for use by children less than five years of age shall have, at a minimum, a drinking fountain, toilet, SHOWER facilities, HANDWASHING STATION, and DIAPER-CHANGING STATION located no greater than 200 feet walking distance and in clear view from the nearest entry/exit of the PUBLIC SWIMMING POOL. All other PUBLIC SWIMMING POOLS, except those exempted under §4625 (l), shall have a drinking fountain, toilet, SHOWER facilities, and HANDWASHING STATION located no greater than 300 feet walking distance from each PUBLIC SWIMMING POOL.

(b) All PUBLIC SWIMMING POOLS allowing use by diaper-aged BATHERS (i.e., children less than five years of age) shall have at least one DIAPER-CHANGING STATION in each male and female HYGIENE FACILITY or make available a unisex DIAPER-CHANGING STATION. DIAPER CHANGING UNITS shall conform to the ASTM Standard F2285-04*: Consumer Performance Standards for Commercial Diaper-Changing Stations* or the STANDARDS for diaper-changing surfaces in the most current version of *Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care Programs*.

(c) If a hand wash sink is not available adjacent to the DIAPER-CHANGING STATION, a portable HANDWASHING STATION shall be available adjacent to the station at all times. In addition, a covered, hands-free, plastic-lined trash receptacle or diaper pail shall be located directly adjacent to the DIAPER-CHANGING UNIT.

(d) The minimum number of CLEANSING SHOWERS shall be one per gender for PUBLIC SWIMMING POOLS less than 4,000 square feet in collective surface area. An additional CLEANSING

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SHOWER per gender shall be added for each additional 4,000 square feet of POOL space or portion thereof. CLEANSING SHOWERS shall be evenly distributed between genders, as applicable. The layout of the SHOWER rooms shall be such that the BATHERS on leaving the dressing room pass the toilets and SHOWERS enroute to the PUBLIC SWIMMING POOL.

(e) SHOWERS shall be supplied with soap in a soap dispenser, and water at a rate of at least three gallons per minute per SHOWER head.

(f) Entryways to private or group CLEANSING SHOWER areas shall be enclosed by a door or curtain made of smooth, easy-to-clean material.

(g) A minimum of one RINSE SHOWER shall be provided on the DECK near an entry point to the PUBLIC SWIMMING POOL or arranged to encourage BATHERS to use the RINSE SHOWER prior to entering the POOL. A minimum of four showerheads per 50 feet of beach entry POOLS shall be provided as a RINSE SHOWER. A minimum of one RINSE SHOWER shall be provided at each entrance to a LAZY RIVER and WATERSLIDE queue line.

(h) PUBLIC SWIMMING POOLS with 7,500 square feet of water area or more may be flexible in the number of SHOWERS they provide based on the THEORETICAL PEAK OCCUPANCY in §4624 provided the following requirements are met:

(1) 25% of the required SHOWERS shall be CLEANSING SHOWERS;

(2) 25% of the required SHOWERS shall be RINSE SHOWERS; and

(3) the remaining 50% may be either CLEANSING or RINSE SHOWERS.

(i) All floors and other surfaces which may be walked on by BATHERS shall have a smooth, easy-to-clean, impervious-to-water, slip-resistant surface. Floors shall be sloped to drain water or other liquids.

PROPOSED

(j) Walls, partitions, doors, lockers, and similar surfaces which require periodic cleaning shall be of impervious material, smooth, and finished so as to facilitate thorough scrubbing. Interior walls and partitions shall terminate not less than six inches above the floor, or shall rest on masonry or concrete not less than four inches above the floor. Junctures inside the building between all walls or partitions and floors of structures shall be covered.

(k) Lockers shall be set either on solid masonry bases four inches high or on legs with bottom of locker at least ten inches above the floor. Lockers shall be properly vented.

(l) The requirement relating to dressing rooms and SHOWERS shall be waived, if requested by owner, for POOLS with use limited to the tenants of the specific motel, apartment complex, condominium, or hotel that is served, and whose PATRONS use these facilities in their own quarters before entering the POOL. If toilets in the private quarters or public sections of these establishments are available to all swimmers within a travel distance of three hundred feet from a POOL, and are located not more than two floors above or below the POOL DECK, toilet facilities will not have to be provided at the POOL DECK. Drinking fountains will not be required at POOLS for motels, apartment complexes, condominiums or hotels.

(m) Unless exempted by (l) of this Section, toilet and handwashing facilities shall be provided for the THEORETICAL PEAK OCCUPANCY as computed under §4624 on the basis of the fixture schedule on Table 9.

Table 9. Minimum Required Plumbing Fixtures		
Hygiene Facility	Males	Females
Toilets	1/75	1/40
Urinals	1/75	----
Handwashing Sinks	1/100	1/100
Fixture schedules may be increased in public swimming pools at school, camps, or similar locations where bather loads may reach peaks due to schedules of use.		

PROPOSED

(n) HYGIENE FACILITY floors, walls, and ceilings shall be kept clean and free of visible mold and mildew at all times.

(o) HYGIENE FACILITY fixtures, dressing area fixtures, and furniture shall be cleaned and SANITIZED daily, and more often if necessary, with an EPA-registered product.

(p) HYGIENE FACILITY fixtures shall be maintained in good repair. Toilet tissue shall be provided in toilet rooms and soap and paper towels shall be provided at each handwashing sink. A minimum of one hands-free trash receptacle shall be provided in areas adjacent to handwashing sinks.

(q) FOOT BATHS shall be prohibited.

§4626. Bathing Suits, Caps, and Towels.

Reusable bathing suits, caps, and towels furnished to PUBLIC SWIMMING POOL users by the management shall be laundered and/or cleaned, and SANITIZED after each usage. Adequate STORAGE shall be provided for storing clean suits, towels, and other shared equipment, and shall be separate from used or unclean materials.

§4627. Barriers and Enclosures.

(a) All PUBLIC SWIMMING POOLS, CHEMICAL STORAGE SPACES, and mechanical spaces shall be enclosed to prevent unauthorized entry. The ENCLOSURE may consist of any combination of building envelopes, site walls, or fencing and shall not be less than six feet in height measured from the finished grade to the top of the BARRIER on the side outside of the BARRIER surrounding the PUBLIC SWIMMING POOL. Chain-link fencing constructed of a maximum opening of 1 ¾ inches mesh shall be permitted.

(b) All primary public access gates or doors serving as part of a PUBLIC SWIMMING POOL ENCLOSURE or required PUBLIC SWIMMING POOL ENCLOSURE shall be self-closing and self-

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latching from any open position. All gates or doors shall be capable of being locked from the exterior and shall be at least equal in height at top and bottom to the BARRIER of which they are a component. Turnstiles shall not form a part of a PUBLIC SWIMMING POOL ENCLOSURE. For unguarded PUBLIC SWIMMING POOLS, self-latching mechanisms must be located not less than four and a half feet above finished grade.

§4628. Visitor and Spectator Areas.

(a) When a spectator area or an access to a spectator area is located within the PUBLIC SWIMMING POOL ENCLOSURE, the DECK adjacent to the area or access shall provide egress width for the spectators in addition to the width required by §4617. The additional width shall be based on the egress requirements in the applicable building code based on the THEORETICAL PEAK OCCUPANCY of the PUBLIC SWIMMING POOL served with a minimum width of four feet.

(b) A BARRIER located on the DECK to separate the DECK used by spectators from the PERIMETER DECK used by BATHERS may have one or more openings directly into the BATHER areas with a demarcation line on the DECK that shows the separation between the DECK used by spectators and the PERIMETER DECK used by BATHERS.

(c) A spectator or other area located in a balcony within ten feet of or overhanging any portion of a PUBLIC SWIMMING POOL shall be designed to deter jumping or diving into the PUBLIC SWIMMING POOL.

(d) No food or drink shall be permitted in the immediate area of the PUBLIC SWIMMING POOL or on the DECKS surrounding the POOL except that food and beverage will be allowed in the visitor and spectator area, or in a similarly separated snack area for BATHERS, if beverages are served in non-breakable containers and trash containers are provided to keep litter off of the POOL DECKS.

PROPOSED

§4629. Cleaning and Maintenance.

(a) The PUBLIC SWIMMING POOL wall, floor, walkway, and DECK floor shall be kept clean and free from accumulation of algae, mold, mildew, and/or slime.

(b) Floating scum, sputum, and debris in the PUBLIC SWIMMING POOL shall be removed within twenty-four hours or more frequently as required. Visible dirt on the bottom of a PUBLIC SWIMMING POOL shall be removed at least once each day.

(c) All parts of the POOL shall be maintained in good repair. Floors shall be kept free from cracks and other defects, and shall conform with §4607. Walls, ceilings, and equipment shall be painted as often as necessary to be kept in good condition.

(d) The whole POOL area shall be kept clean and sanitary, free of litter, and pests. Hoses shall be maintained for regular flushing and cleaning. During extended periods of non-use when the recirculation and purification is not functioning, POOLS shall be maintained so as to prevent their becoming a mosquito breeding source. This shall be accomplished by securely covering, draining the POOL of all water, and keeping the POOL free of standing water; or by some other means as approved by the DEPARTMENT.

§4630. Wading Pool.

In addition to the general PUBLIC SWIMMING POOL requirements stated in these rules and regulations, WADING POOLS shall be separated from other POOLS by a BARRIER that meets the requirements of §4627, unless the WADING POOL is separated by a distance of 15 feet from other bodies of water. WADING POOLS near other WADING POOLS shall not be required to be separated by a BARRIER.

§4631. Spas.

PROPOSED

In addition to the general PUBLIC SWIMMING POOL requirements stated in these rules and regulations, SPAS shall comply with the following provisions:

(a) The maximum water depth in SPAS shall be four feet measured from the designed static water line except for SPAS that are designed for special use and purposes and approved by the DEPARTMENT.

(b) The maximum submerged depth of any seat or sitting bench shall be 28 inches measured from the water line.

(c) A SPA shall have one or more suitable, slip-resistant handhold(s) around the perimeter and not over 12 inches above the water line.

(d) Interior steps or stairs shall be provided where SPA depths are greater than 24 inches. Each set of steps shall be provided with at least one handrail to serve all treads and risers.

(e) Elevated SPAS may be located adjacent to another PUBLIC SWIMMING POOL as long as there is an effective BARRIER between the SPA and the adjacent PUBLIC SWIMMING POOL, or a minimum distance of four feet between the PUBLIC SWIMMING POOL and SPA is provided.

(f) A minimum of two depth markers shall be provided regardless of the shape or size of the SPA.

(g) Water temperatures shall not exceed 104°F.

(h) The agitation system shall be connected to a minute timer that does not exceed 15 minutes that shall be located out of reach of a BATHER in the SPA.

(i) All SPAS shall have a clearly labeled emergency shutoff or control switch for the purpose of stopping the motor(s) that provide power to the RECIRCULATION SYSTEM and hydrotherapy or agitation system that shall be installed and be readily accessible to the BATHERS, in accordance with the NEC.

PROPOSED

(j) SPAS shall have a minimum of two adjustable filter system INLETS spaced at least three feet apart and designed to distribute flow evenly.

§4632. Water Slides.

(a) The design engineer shall address compliance with the following STANDARDS and must provide documentation and/or certification that the WATERSLIDE design is in conformance with these STANDARDS:

(1) ASTM F2376-13: *Standard Practice for Classification, Design, Manufacture, Construction, and Operation of Water Slide Systems; and*

(2) ASTM F2469-09: *Standard Practice for Manufacturer, Construction, Operation, and Maintenance of Aquatic Play Equipment*.

(b) Signs indicating riding instructions, warnings, and requirements in accordance with the manufacturer recommendations shall be posted at the WATERSLIDE entry.

(c) FLUME surfaces shall be inert, nontoxic, smooth, and easily cleaned. All FLUME valleys and dips shall have proper drainage, SAFETY measures that insure a rider cannot fall from the FLUME, and a means of egress in the event the ride malfunctions or a rider stops on the ride. The exit of any FLUME must be designed to ensure that BATHERS enter the LANDING POOL or SLIDE RUNOUT at a safe speed and angle of entry. If a WATERSLIDE has two or more FLUMES and there is a point of intersection between the centerlines of any two FLUMES, the distance between that point and the point of exit for each intersecting FLUME must not be less than the SLIDE manufacturer's recommendations and ASTM F2376.

(d) WATERSLIDES shall be designed to terminate at or below water level, except for DROP SLIDES or unless otherwise permitted by the WATERSLIDE manufacturer and ASTM F2376. WATERSLIDES shall be perpendicular to the wall of the PUBLIC SWIMMING POOL at the point of

PROPOSED

exit unless otherwise permitted by the WATERSLIDE manufacturer. WATERSLIDES shall be designed with an exit system which shall be in accordance with the WATERSLIDE manufacturer's recommendations and ASTM F2376, and provides for safe entry into the LANDING POOL or WATERSLIDE RUNOUT.

(e) If steps are provided instead of exit ladders or RECESSED STEPS with grab rails, they shall be installed at the opposite end of the LANDING POOL from the FLUME exit and a handrail shall be provided.

(f) If the WATERSLIDE FLUME ends in a PUBLIC SWIMMING POOL, the landing area shall be divided from the rest of the PUBLIC SWIMMING POOL by a float line, wing wall, peninsula, or other similar feature to prevent collisions with other BATHERS.

(g) A PERIMETER DECK shall be provided along the exit side of the LANDING POOL. In addition, a walkway, steps, stairway or ramp shall be provided between the LANDING POOL and the top of the FLUME.

(h) There shall be a SLIDE landing area in accordance with the SLIDE manufacturer's recommendations and ASTM F2376. This area shall not infringe on the landing area for any other SLIDES, diving equipment, or any other minimum PUBLIC SWIMMING POOL clearance requirements. The minimum required water depth shall be in accordance with the SLIDE manufacturer's recommendations and ASTM F2376.

(i) The landing area of the SLIDE shall be protected through the use of a float line, wing wall, peninsula. or other similar impediment to prevent collisions with other BATHERS.

§4633. Lazy Rivers.

In addition to the general PUBLIC SWIMMING POOL requirements stated in these rules and regulations, LAZY RIVERS shall comply with the following additional provisions:

PROPOSED

(a) Handrails, steps, stairs, and propulsion jets for LAZY RIVERS shall not protrude into the river.

(b) Means of access/egress shall be provided at 150-foot intervals around the LAZY RIVER.

(c) A DECK shall be provided along the entire length of the LAZY RIVER.

(d) Obstructions around the perimeter of the LAZY RIVER, such as bridges or landscaping, shall be allowed provided they do not impact lifeguarding, sight lines, or rescue operations. All bridges spanning a LAZY RIVER shall have a minimum clearance of both seven feet from the bottom of the LAZY RIVER and four feet above the water surface to any structure overhead.

§4634. Qualified Operator.

(a) Every PUBLIC SWIMMING POOL shall be under the supervision of a QUALIFIED OPERATOR who shall assume the responsibility for compliance with all parts of these rules and regulations relating to POOL operation and maintenance and SAFETY of BATHERS. A QUALIFIED OPERATOR shall have completed an operator training course that is recognized by the DEPARTMENT. Originals or copies of such course certificate or documentation shall be available on site for inspection by the health officer for each QUALIFIED OPERATOR employed at or contracted by the site.

(b) A QUALIFIED OPERATOR shall be on-site or immediately available within two hours during all hours of operation at a PUBLIC SWIMMING POOL that:

(1) Has more than two PUBLIC SWIMMING POOLS;

(2) Has over 50,000 gallons of water;

(3) Include features with recirculated water;

PROPOSED

(4) Is used as a THERAPY POOL or to provide swimming training;

(5) Allows BATHER count of greater than 200 BATHERS daily;

(6) Is operated by a municipality or a school; or

(7) Has a history of repeated violations of these rules and regulations which in the opinion of the health officer requires one or more on-site QUALIFIED OPERATORS.

(c) All other PUBLIC SWIMMING POOLS shall have an on-site QUALIFIED OPERATOR immediately available within two hours or a contract with a QUALIFIED OPERATOR for a minimum of weekly visits and assistance whenever needed.

(d) A QUALIFIED OPERATOR shall keep operation, SAFETY, emergency, and training plans on file at the facility. In addition, records pertaining to the operation, maintenance and management of the PUBLIC SWIMMING POOL, such as chemical inventory log, water monitoring and testing records, and other records required in these rules and regulations shall be maintained. Such records shall be kept for a minimum of three years and shall be available upon request by the health officer.

(e) The QUALIFIED OPERATOR shall ensure that a daily preventive maintenance inspection for PUBLIC SWIMMING POOLS listed in (b) of this Section is done before opening and that it shall include the following:

(1) Walkways/DECK and exits are clear, clean, free of debris;

(2) Drain covers, vacuum fitting covers, SKIMMER equalizer covers, and any other suction outlet covers are in place, secure, and unbroken;

(3) SKIMMER baskets, weirs, lids, flow adjusters, and suction outlets are free of any blockage;

PROPOSED

(4) INLET and return covers and any other fittings are in place, secure, and unbroken;

(5) SAFETY warning signs and other signage are in place and in good repair;

(6) SAFETY equipment as required by these rules and regulations are in place and in good repair, including emergency instructions and phone numbers;

(7) Entrapment prevention systems are operational;

(8) Recirculation, DISINFECTION systems, controller(s), and probes are operating as required;

(9) SECONDARY DISINFECTION SYSTEMS are operating as required;

(10) Underwater lights and other lighting are intact with no exposed wires or water in lights;

(11) Slime and biofilm have been removed from accessible surfaces of PUBLIC SWIMMING POOL SLIDES, and other features;

(12) Doors to non-public areas (CHEMICAL STORAGE SPACES, offices, etc.) are locked;

(13) First aid supplies are stocked;

(14) Emergency communication equipment and systems are operational;

(15) Fecal/vomit/blood incident contamination response protocols, materials, and equipment are available;

(16) Water features and amenities are functioning in accordance with the manufacturer's recommendations;

PROPOSED

(17) Fencing/BARRIERS, gates, and self-latching or other locks are tested and are intact and functioning properly, and BARRIERS do not have nearby furniture to encourage climbing;

(18) Drinking fountains are clean and in functional condition;

(19) Electrical devices are in good working condition and meet the requirements specified in the NEC and these rules and regulations;

(20) Alarms, if required, are tested and functioning properly; and

(21) Assessing water clarity such that the bottom and objects in the POOL are clearly visible.

§4635. Safety Requirements.

(a) PUBLIC SWIMMING POOLS operated primarily for unorganized use and having an area of more than two thousand two hundred fifty square feet of water surface area, shall be provided with an elevated lifeguard platform or chair. In POOLS with four thousand square feet or more of water surface area, additional elevated chairs or stations located so as to provide a clear unobstructed view of the POOL bottom in the area under surveillance shall be provided. (Ideally, chairs should be placed in locations which eliminate sun glare on the water, and in positions which will give complete coverage of the POOL within a field view limited to 45^0 on either side of a line of sight extending straight out from the chair.)

(b) Enough acoustical treatment, including material and ceiling design, shall be given to enclosed POOL rooms to control noise levels. It is essential for SAFETY that swimmers be able to hear signals and directions of routine supervision as well as emergency control.

(c) When the POOL is not open for use, access to the POOL shall be prevented.

PROPOSED

(d) At all POOLS, diagrammatic illustrations of artificial respiration procedures shall be posted where clearly visible from the nearby DECK and shall be protected against the elements. Also, the location and telephone number of the nearest ambulance, hospital, fire, or police rescue service, physician, and POOL operator shall be kept similarly posted together with instructions that in case of need, manual or mouth-to-mouth artificial respiration should be started immediately and continued until a physician arrives or mechanical resuscitators are applied.

(e) Whenever the POOL is opened for use and no lifeguard service is provided, the warning sign shall be placed in plain view and shall state "Warning -- No Lifeguard on Duty" with clearly visible letters at least four inches high. In addition, the sign shall also state "Children under the age of 14 should not use POOL without direct adult supervision."

(f) The PUBLIC SWIMMING POOL, as necessary, shall have a functional telephone or other communication system or device that is hard wired and capable of directly dialing 911 or function as the emergency notification system. The telephone or communication system or device shall be conspicuously provided and accessible to PUBLIC SWIMMING POOL users such that it can be reached immediately. Alternate functional systems, devices, or communication processes are allowed with the DEPARTMENT's approval in situations when a hardwired telephone is not logistically sound, and an alternate means of communication is available. A permanent sign providing emergency dialing directions and the PUBLIC SWIMMING POOL address shall be posted and maintained at the emergency telephone, system or device.

§4636. Lifesaving Equipment, First-Aid Kit.

(a) PUBLIC SWIMMING POOLS whose depth exceeds two feet of standing water shall provide and maintain a U.S. Coast Guard-approved PUBLIC SWIMMING POOL rescue throwing device, with at least a quarter-inch thick rope whose length is 50 feet or 1 and ½ times the width

PROPOSED

of the POOL, whichever is less. The rescue throwing device shall be located in the immediate vicinity to the PUBLIC SWIMMING POOL and be accessible to BATHERS.

(b) PUBLIC SWIMMING POOLS whose depth exceeds two feet of standing water shall provide and maintain a reaching pole of 12-foot to 16-foot in length, non-telescopic, light in weight, and with a securely attached Shepherd's Crook with an aperture of at least 18 inches. The reaching pole shall be located in the immediate vicinity to the PUBLIC SWIMMING POOL and be accessible to BATHERS and PATRONS.

(c) When any POOL is of such size that unaided swimming rescues by lifeguards may not offer sufficient protection to swimmers, one or more square-sterned boats equipped with oars, oarlocks, life rings, or paddle boards shall be provided.

(d) Every PUBLIC SWIMMING POOL shall be equipped with a STANDARD first-aid kit which shall be kept filled and ready for use. Signage shall be provided at the PUBLIC SWIMMING POOL which clearly identifies first aid location(s). Availability of a kit in the office of the resident manager for a motel, apartment complex, condominium, or hotel shall satisfy this requirement for such POOLS.

(e) Lifesaving equipment shall be mounted in conspicuous areas around the PUBLIC SWIMMING POOL DECK, at lifeguard chairs, or elsewhere, readily accessible, its function plainly marked, and kept in repair and ready condition. BATHERS or other PERSONS shall not be permitted to tamper with or remove such equipment from its established location for any purpose other than the intended emergency use.

§4637. Qualified Lifeguards.

(a) One or more QUALIFIED LIFEGUARDS shall be on duty at POOL side at all times when the PUBLIC SWIMMING POOL is open to use by BATHERS except at POOLS with less than

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2,250 square feet of water surface. Such attendant should be in full charge of bathing and have authority to enforce all rules of SAFETY and sanitation.

(b) A QUALIFIED LIFEGUARD shall:

(1) Be a capable swimmer and be competent in lifesaving methods;

(2) Be trained in administration of artificial respiration and other first-aid measures;

(3) Have satisfactorily completed a lifeguard training course recognized by the DEPARTMENT. The valid and current certificate of completion of the course of instruction shall be available for verification;

(4) Be dressed suitably to enter the water and to take action on an emergency; and

(5) Not engaged in activities which would distract his attention from proper supervision of BATHERS using the PUBLIC SWIMMING POOL or prevent immediate attention to a BATHER in distress in the water.

(c) Each QUALIFIED LIFEGUARD conducting PATRON surveillance with the responsibility of in-water rescue in less than three feet of water shall have a rescue tube immediately available for use. Each QUALIFIED LIFEGUARD conducting PATRON surveillance in a water depth of three feet or greater shall have a rescue tube on his/her PERSON in a rescue ready position.

(d) PUBLIC SWIMMING POOLS with standing water and with any of the following conditions shall be required to have a lifeguard(s) conducting PATRON surveillance at all times the PUBLIC SWIMMING POOL is open.

(1) Any PUBLIC SWIMMING POOL deeper than five feet at any point;

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(2) Any PUBLIC SWIMMING POOL that allows for unsupervised children under the age of 14 years;

(3) Any PUBLIC SWIMMING POOL while it is being used for the recreation of youth groups, including but not limited to childcare usage or school groups;

(4) Any PUBLIC SWIMMING POOL while it is being used for group training must have a dedicated lifeguard on DECK for class surveillance, including but not limited to competitive swimming and/or sports, lifeguard training, exercise programs, and swimming lessons;

(5) Any PUBLIC SWIMMING POOL with a configuration in which any point on the PUBLIC SWIMMING POOL surface exceeds 30 feet from the nearest DECK;

(6) Any PUBLIC SWIMMING POOL with an induced current or wave action including but not limited to WAVE POOLS and LAZY RIVERS;

(7) WATERSLIDE LANDING POOLS; and

(8) Any PUBLIC SWIMMING POOL in which BATHERS enter the water from any height above the DECK including but not limited to diving boards, DROP SLIDES, starting platforms, and/or climbing walls. This does not include POOL SLIDES.

(e) When QUALIFIED LIFEGUARDS are used, the facility shall create and implement a staffing plan which includes diagrammed zones of PATRON surveillance for each PUBLIC SWIMMING POOL such that:

(1) The QUALIFIED LIFEGUARD is capable of viewing the entire area of the assigned zone of PATRON surveillance;

(2) The QUALIFIED LIFEGUARD is able to reach the furthest extent of the assigned zone of PATRON surveillance within 20 seconds;

PROPOSED

(3) Identify whether the QUALIFIED LIFEGUARD is in an elevated stand, walking, in-water and/or other approved position;

(4) Identifying any additional responsibilities for each zone; and

(5) All areas of each PUBLIC SWIMMING POOL are assigned a zone of PATRON surveillance and all zones of PATRON surveillance are staffed during operation.

(f) Employees who are ill with diarrhea shall not be permitted to enter the water or perform in a QUALIFIED LIFEGUARD role. Employees with open wounds shall be permitted in the water or in a QUALIFIED LIFEGUARD role only if they have healthcare provider approval or wear a waterproof, occlusive bandage to cover the wound.

§4638. Supervision of Bathers.

(a) POOL staff should encourage the following personal conduct regulations:

(1) All BATHERS shall be instructed to use the toilet, and particularly to urinate, before taking a cleansing bath and entering the POOL;

(2) All PERSONS using the PUBLIC SWIMMING POOL shall take a CLEANSING SHOWER bath in the nude, using warm water and soap and thoroughly rinsing off all suds, before entering the PUBLIC SWIMMING POOL room or ENCLOSURE. A BATHER leaving the POOL to use the toilet shall take another cleansing bath before returning to the PUBLIC SWIMMING POOL room or ENCLOSURE;

(3) Any PERSON having an infectious or communicable disease shall be excluded from a PUBLIC SWIMMING POOL. PERSONS having any considerable area of exposed sub-epidermal tissue, open blisters, cuts, etc., shall be warned that these are likely to become infected and advised not to use the POOL;

PROPOSED

(4) Spitting, spouting of water, blowing the nose, etc., in the PUBLIC SWIMMING POOL shall be strictly prohibited; and

(5) No running, boisterous or rough play, except supervised water sports, shall be permitted in the POOL, on the runways, DECK, diving boards, floats, platforms, or in dressing rooms, SHOWER rooms, etc.

(b) Signage shall be placed in a conspicuous place at the entrance of the PUBLIC SWIMMING POOL communicating expected and prohibited behaviors listed under (a) of this Section using text that complies with the intent of the said information.

§4639. Injury and Illness Incident Reporting.

A full report of any injury or illness incident occurring at a PUBLIC SWIMMING POOL shall be reported by the POOL owner/operator to the DEPARTMENT within 24 hours of its occurrence, and a notation recorded in a log book. This shall include all incidents occurring at a PUBLIC SWIMMING POOL which:

(a) result in death;

(b) require resuscitation;

(c) require referral to a hospital or other facility for medical attention; or

(d) is a BATHER illness associated with bathing water quality.

§4640. Water Contamination Response.

(a) In the event of a fecal or vomit contamination in a PUBLIC SWIMMING POOL, the QUALIFIED OPERATOR shall immediately close the PUBLIC SWIMMING POOL to BATHERS until remediation procedures are complete. This closure shall include the affected PUBLIC SWIMMING POOL and other PUBLIC SWIMMING POOLS that share the same RECIRCULATION SYSTEM.

PROPOSED

(b) Contaminating material shall be removed (e.g., using a net, scoop, or bucket) and disposed of in a sanitary manner. Fecal or vomit contamination of the item used to remove the contamination (e.g., the net or bucket) shall be removed by thorough cleaning followed by DISINFECTION (e.g., after cleaning, leave the net, scoop, or bucket immersed in the POOL during the DISINFECTION procedure prescribed for formed-stool, diarrheal-stool, or vomit contamination, as appropriate). PUBLIC SWIMMING POOL vacuum cleaners shall not be used for removal of contamination from the water or adjacent surfaces unless vacuum waste is discharged to a sanitary sewer and the vacuum equipment can be adequately disinfected.

(c) PUBLIC SWIMMING POOL water that has been contaminated by feces or vomit shall be treated as follows:

1) Check to ensure that the water's pH is 7.5 or lower and adjust if necessary;

2) Verify and maintain water temperature at 77°F or higher;

3) Operate the filtration/RECIRCULATION SYSTEM while the POOL reaches and maintains the proper free CHLORINE concentration during the remediation process;

4) Test the CHLORINE residual at multiple sampling points to ensure the proper free CHLORINE concentration is achieved throughout the POOL for the entire DISINFECTION time; and

5) Use only non-stabilized CHLORINE products to raise the free CHLORINE levels during the remediation.

(d) Formed-stool contaminated water shall have the FREE CHLORINE RESIDUAL checked and the FREE CHLORINE RESIDUAL raised to 2.0 mg/L (if less than 2.0 mg/L) and maintained for at least 25 minutes (or an equivalent time and concentration to reach the CT VALUE) before reopening the PUBLIC SWIMMING POOL.

PROPOSED

(e) Diarrheal-stool contaminated water shall:

1) Check the FREE CHLORINE RESIDUAL and then raise the FREE CHLORINE RESIDUAL to 20.0 mg/L and maintain for at least 12.75 hours (or an equivalent time and concentration to reach the CT VALUE) before reopening the PUBLIC SWIMMING POOL, or

2) Circulate the water through a SECONDARY DISINFECTION SYSTEM to theoretically reduce the number of *Cryptosporidium* OOCYSTS in the PUBLIC SWIMMING POOL below one OOCYST/100 mL.

(f) In PUBLIC SWIMMING POOL water that contains CYA or a stabilized CHLORINE product, water shall be treated by:

(1) Hyperchlorination accomplished by:

(i) Following the preparatory guidance outlined in (c) of this Section;

(ii) Lowering the CYA concentration to less than or equal to 15 ppm by draining, if necessary;

(iii) Raising the FREE CHLORINE RESIDUAL to 20 mg/L for at least 28 hours; 30 mg/L for at least 18 hours; 40 mg/L for at least 8.5 hours; or an equivalent time and concentration needed to reach the CT INACTIVATION VALUE;

(iv) Measurement of the inactivation time required shall start when the PUBLIC SWIMMING POOL reaches the intended FREE CHLORINE RESIDUAL level or;

(2) Circulating the water through a SECONDARY DISINFECTION SYSTEM to theoretically reduce the number of *Cryptosporidium* OOCYSTS in the PUBLIC SWIMMING POOL below one OOCYST/100 mL; or

(3) Draining the PUBLIC SWIMMING POOL completely.

PROPOSED

(g) Vomit-contaminated water shall have the FREE CHLORINE RESIDUAL checked and the FREE CHLORINE RESIDUAL raised to 2.0 mg/L (if less than 2.0 mg/L) and maintained for at least 25 minutes (or an equivalent time and concentration to reach the CT VALUE) before reopening the PUBLIC SWIMMING POOL.

(h) In PUBLIC SWIMMING POOL water that contains CYA or a stabilized CHLORINE product, water shall be treated by doubling the inactivation time required in these rules and regulations. Measurement of the inactivation time required shall start when the PUBLIC SWIMMING POOL reaches the intended free CHLORINE level.

(i) If a bodily fluid, such as feces, vomit, or blood, has contaminated a surface in a PUBLIC SWIMMING POOL, facility staff shall limit access to the affected area until remediation procedures have been completed. All visible CONTAMINANT shall be removed and the contaminated surface cleaned and disinfected.

§4641. Inspection and Grading.

(a) Access.

An employee or representative of the DEPARTMENT shall, after proper presentation of credentials, have access to any PUBLIC SWIMMING POOL at any reasonable time for the purpose of making inspections to determine compliance with these rules and regulations. Denial of access shall be cause for suspension of the Sanitary Permit.

(b) Report of Inspections.

Whenever an inspection of a PUBLIC SWIMMING POOL is conducted, the findings shall be recorded on a form authorized by the DIRECTOR, shall summarize the requirements of these rules and regulations, and shall set forth a demerit value for each requirement. Demerit value assignments shall be from one through six. Inspection remarks shall be written to reference, by

PROPOSED

section number, the section violated, and shall state the correction to be made. The rating score of the establishment shall be the total of the demerit values for all violations. A copy of the completed inspection report form shall be issued to the operator of the establishment at the conclusion of the inspection. The completed form is a public document that shall be made available for public disclosure to any person who requests it according to law.

(c) Appeal.

The report of inspection of a PUBLIC SWIMMING POOL shall state that an opportunity for appeal from any notice or inspection findings will be provided if a written request for a hearing is filed with the DIRECTOR within the period of time established in the notice for correction.

(d) Grading.

(1) Grades of a PUBLIC SWIMMING POOL shall be as follows:

(i) Grade A: An establishment having a demerit score of not more than ten;

(ii) Grade B: An establishment having a demerit score of more than ten but not more than twenty;

(iii) Grade C: An establishment having a demerit score of more than twenty but not more than forty; and

(iv) Grade D: An establishment having a demerit score of more than forty.

(2) The DEPARTMENT shall issue a placard reflecting the letter grade of the most recent inspection.

(3) The DEPARTMENT shall establish a specific and reasonable period of time for correction of the violations found, in accordance with the following provision:

PROPOSED

(i) When the demerit score of the establishment is twenty or less, all violations of one through five demerits must be corrected within a period of time not to exceed 30 days; or

(ii) When the demerit score of the establishment is more than twenty but less than forty-one, all items of one through five demerit points must be corrected within a period of time not to exceed 15 days; or

(iii) When one or more six demerit point items are in violation, regardless of demerit score, such items must be corrected within a period of time not to exceed 10 days; and

(iv) When the demerit score of the establishment is more than forty, the Sanitary Permit shall be immediately suspended.

(4) The operator shall at the time of inspection correct a violation of a CRITICAL ITEM of these rules and regulations. Considering the nature of the potential hazard involved and the complexity of the corrective action needed, the DIRECTOR may agree to or specify a longer time frame, not to exceed 10 calendar days after the inspection, for the operator to correct violations of a CRITICAL ITEM.

(5) The operator shall correct noncritical violations by a date and time agreed to or specified by the DIRECTOR but no later than 30 calendar days after the inspection. The DIRECTOR may approve a compliance schedule that extends beyond this time limit if a written schedule of compliance is submitted by the operator and no health hazard exists or will result from allowing an extended schedule of compliance.

PROPOSED

(e) Notwithstanding the grade criteria established above, whenever a second consecutive violation of the same item of 2, 4, or 6 demerit points is discovered, the permit may be suspended or in lieu thereof, the establishment shall be downgraded to the next lower grade.

(f) The operator shall ensure that he/she, or a designee, be present during inspections of a PUBLIC SWIMMING POOL by the DEPARTMENT.

(g) The Inspection Report and Letter Grade Placard shall be posted in a conspicuous area designated by the DIRECTOR or his/her representative.

§4642. Closure of Public Swimming Pool.

(a) Except as specified in (b) of this Section, an operator shall immediately discontinue operations and notify the DEPARTMENT if an IMMINENT HEALTH HAZARD may exist because of an emergency such as a fire, flood, extended interruption of electrical or water service, sewage backup, misuse of poisonous or toxic materials, gross insanitary occurrence or condition, or other circumstance that may endanger public health, such those listed in (d) of this Section.

(b) An operator need not discontinue operations in an area of a PUBLIC SWIMMING POOL that is unaffected by the IMMINENT HEALTH HAZARD.

(c) Failure to report an IMMINENT HEALTH HAZARD to the DEPARTMENT may result in immediate suspension of the Sanitary Permit.

(d) The DIRECTOR shall order immediate correction of the following violations, or immediate closure of the PUBLIC SWIMMING POOL whenever he finds any of the following conditions:

(1) Failure to continuously operate the PUBLIC SWIMMING POOL filtration or DISINFECTION equipment;

PROPOSED

(2) Failure to provide adequate supervision and staffing as described in these rules and regulations;

(3) Failure to provide the minimum disinfectant residual levels;

(4) pH below 6.5 or above 8.0;

(5) Use of an unapproved or contaminated water supply source for potable water use;

(6) Unprotected overhead electrical wires within 20 feet horizontally of the PUBLIC SWIMMING POOL;

(7) Non-GFCI protected electrical receptacles within 20 feet of the inside wall of the PUBLIC SWIMMING POOL;

(8) Failure to maintain an emergency lighting source;

(9) Absence of all required lifesaving equipment on DECK;

(10) PUBLIC SWIMMING POOL bottom not visible;

(11) Total absence of or improper depth markings at a PUBLIC SWIMMING POOL;

(12) Plumbing CROSS-CONNECTIONS between the drinking water supply and PUBLIC SWIMMING POOL water or between sewage system and the PUBLIC SWIMMING POOL including filter backwash facilities;

(13) Failure to provide and maintain an ENCLOSURE or BARRIER to inhibit unauthorized access to the PUBLIC SWIMMING POOL when required;

(14) Use of unapproved chemicals or the application of chemicals by unapproved methods to the PUBLIC SWIMMING POOL water;

(15) Broken, unsecured, or missing main drain grate or any submerged suction outlet grate in the PUBLIC SWIMMING POOL;

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(16) Number of BATHERS/PATRONS exceeds the THEORETICAL PEAK OCCUPANCY;

(17) Broken glass or sharp objects in PUBLIC SWIMMING POOL or on DECK area;

(18) Failure to possess a valid Sanitary Permit; or

(19) It is declared a "public nuisance" as defined in 10 GCA §20107.

(e) When the DIRECTOR orders closure of a PUBLIC SWIMMING POOL, he shall issue a written order to the PUBLIC SWIMMING POOL owner, operator, or his representative stating that the PUBLIC SWIMMING POOL is to be closed immediately and specifying corrective action(s) to be taken. The PERSON to whom the order is issued shall close the PUBLIC SWIMMING POOL immediately and shall prohibit any PERSON from using it. The DIRECTOR or his/her representative shall post a notice, easily visible to the public, stating that said POOL is closed by order of the DIRECTOR and that swimming is prohibited.

(f) After the initial written order to close the PUBLIC SWIMMING POOL is issued, and after the specified corrective action(s) has been taken, the owner, operator or his representative shall notify the DIRECTOR that the PUBLIC SWIMMING POOL is ready for re-inspection.

(g) If upon re-inspection the corrective action is not approved, the PUBLIC SWIMMING POOL shall remain closed and kept out of use until corrective action is approved.

(h) A PERSON shall not remove a notice of closure posted by the DIRECTOR or his/her representative, except with the express written consent of the DIRECTOR.

§4643. Variance.

(a) The DIRECTOR may, on written application and after review, grant a VARIANCE from a specific provision of these rules and regulations, subject to appropriate conditions which shall include a time schedule for compliance when such VARIANCE is in harmony with the general

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purposes and intent of these rules and regulations, and when there are practical difficulties or unnecessary hardship in complying with such provision. The application shall include, but not be limited to:

(1) A citation of the section to which the VARIANCE is requested;

(2) A statement as to why the applicant is unable to comply with the section to which the VARIANCE is requested;

(3) The nature and duration of the VARIANCE requested;

(4) A statement of how the intent of these rules and regulations will be met and the reasons why the public health or SAFETY would not be jeopardized if the VARIANCE was granted; and

(5) A full description of any policies, procedures, or equipment that the applicant proposes to use to rectify any potential increase in health or SAFETY risks created by granting the VARIANCE.

(b) A VARIANCE request from an existing PUBLIC SWIMMING POOL that possessed a valid Sanitary Permit at the time of the effective date of these rules and regulations shall be approved by the DIRECTOR, provided no injuries or disease transmission have occurred in the existing PUBLIC SWIMMING POOL as a result of the deficiency or non-compliance, and the VARIANCE request:

(1) Is not for the requirements of §§4608-4615 and §§4634-4642; and

(2) Will not result in an IMMINENT HEALTH HAZARD.

(c) Any VARIANCE approved pursuant to (b) of this Section shall remain in effect indefinitely until:

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(1) The Sanitary Permit of the existing PUBLIC SWIMMING POOL expires and not renewed within two years from the date of the expiration;

(2) The existing PUBLIC SWIMMING POOL undergoes SUBSTANTIAL ALTERATION; OR

(3) An injury or a disease transmission is documented as a result of the VARIANCE.

(d) The DIRECTOR, not his/her representative, is delegated the authority to approve such VARIANCE.

§4644. Exemption.

A PUBLIC SWIMMING POOL is exempt from the provisions relating to BARRIERS and ENCLOSURES under §4627 and §4630 when all of the following alternative SAFETY measures are in place:

(1) 24-hour manned security;

(2) monitored video surveillance of the entire perimeter of the facility; and

(3) signage posted in a conspicuous place communicating that unauthorized entry is prohibited.

§4645. Severability.

If any provision or the application of any provision of these rules and regulations is held invalid, that invalidity shall not affect other provisions or applications of these rules and regulations.

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RULES AND REGULATIONS FOR PUBLIC SWIMMING POOLS

Article 6
26 Guam Administrative Rules and Regulations
Division 1
Chapter 4

PROPOSED

DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES
DIVISION OF ENVIRONMENTAL HEALTH
123 Chalan Kareta
Mangilao, Guam 96913-6304
(671) 735-7221

12.31.18

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§4601. Purpose.

The purpose of these rules and regulations is to repeal and replace existing rules and regulations of the Department of Public Health and Social Services that govern PUBLIC SWIMMING POOL sanitation for safeguarding public health and providing BATHERS a swimming environment that is safe and conducive to good health. The Model Aquatic Health Code was utilized in the development of these rules and regulations.

§4602. Authority.

Title 10 Guam Code Annotated (GCA), Chapter 21, Section 21102 authorizes the DIRECTOR of the Department of Public Health and Social Services to establish rules and regulations to carry out the provisions of Chapter 29, Title 10 GCA.

§4603. Title.

These rules and regulations shall be known as the *"Rules and Regulations for Public Swimming Pools."*

§4604. Definitions.

(a) *Agitated Water* means a PUBLIC SWIMMING POOL with mechanical means to discharge, spray, or move the water's surface above and/or below the static water line of the PUBLIC SWIMMING POOL. Where there is no static water line, movement shall be considered above the deck plane.

(b) *Backflow* means a hydraulic condition caused by a difference in water pressure that causes an undesirable reversal of the flow as the result of a higher pressure in the system than in its supply.

(c) *Barrier* means an obstacle intended to prevent direct access from one point to another.

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(d) *Bather* means a person at a PUBLIC SWIMMING POOL who has contact with water either through spray, or partial or total immersion. The term BATHER as defined, also includes staff members, and refers to those users who can be exposed to contaminated water, as well as potentially contaminate the water.

(e) *Chemical Storage Space* means a space in a PUBLIC SWIMMING POOL facility used for the STORAGE of POOL chemicals such as acids, salt, or corrosive or oxidizing chemicals.

(f) *Chlorine* means an element that at room temperature and pressure is a heavy greenish yellow gas with a characteristic penetrating and irritating smell; it is extremely toxic. It can be compressed in liquid form and stored in heavy steel tanks. When mixed with water, CHLORINE gas forms hypochlorous acid, the primary CHLORINE-based disinfecting agent, hypochlorite ion, and hydrochloric acid. Hypochlorous acid dissociation to hypochlorite ion is highly pH dependent. CHLORINE is a general term which refers to hypochlorous acid and hypochlorite ion in aqueous solution derived from CHLORINE gas or a variety of CHLORINE-based disinfecting agents.

(1) *Available Chlorine* means the amount of CHLORINE in the +1 oxidation state, which is the reactive, oxidized form. In contrast, chloride ion *(Cl^-)* is in the -1 oxidation state, which is the inert, reduced state. AVAILABLE CHLORINE is subdivided into Free Available CHLORINE and Combined Available CHLORINE. POOL chemicals containing AVAILABLE CHLORINE are both oxidizers and disinfectants. Elemental CHLORINE *(Cl_2)* is defined as containing 100% AVAILABLE CHLORINE. The concentration of AVAILABLE CHLORINE in water is normally reported as mg/L (ppm) "as Cl_2," that is, the concentration is measured on a Cl_2 basis, regardless of the source of the AVAILABLE CHLORINE.

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(2) *Combined Chlorine* means that portion of the total residual CHLORINE that is combined with ammonia or nitrogen compounds and will not react with undesirable or pathogenic organisms.

(3) *Free Chlorine Residual*, or *Free Available Chlorine (FAC),* means the portion of the total AVAILABLE CHLORINE that is not "combined chlorine" and is present as hypochlorous acid *(HOCl)* or hypochlorite ion *(OCl^-).* The pH of the water determines the relative amounts of hypochlorous acid and hypochlorite ion. HOCl is a very effective bactericide and is the active bactericide in POOL water. OCl^- is also a bactericide, but acts more slowly than HOCl. Thus, CHLORINE is a more effective bactericide at low pH than at high pH. A FREE CHLORINE RESIDUAL must be maintained for adequate DISINFECTION.

(g) *Contaminant* means a substance that soils, stains, corrupts, or infects another substance by contact or association.

(h) *Critical Item* means a provision of this rules and regulations, that, if in noncompliance, is more likely than other violations to contribute to contamination, illness, or environmental health hazard.

(i) *Cross-Connection* means a connection or arrangement, physical or otherwise, between a potable water supply system and a PLUMBING FIXTURE, tank, receptor, equipment, or device, through which it may be possible for non-potable, used, unclean, polluted and contaminated water, or other substances to enter into a part of such potable water system under any condition.

(j) *CT Inactivation Value, or CT Value*, means a representation of the concentration of the disinfectant (C) multiplied by time in minutes (T) needed for inactivation of a particular CONTAMINANT. The concentration and time are inversely proportional; therefore, the higher the

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concentration of the disinfectant, the shorter the contact time required for inactivation. The CT VALUE can vary with pH or temperature change so these values must also be supplied to allow comparison between values.

(k) *Deck* means surface areas serving the PUBLIC SWIMMING POOL, including the dry DECK, perimeter/wet DECK, and POOL DECK.

(1) *Perimeter Deck* means the hardscape surface area immediately adjacent to and within four feet of the edge of the PUBLIC SWIMMING POOL; also known as the "wet deck" area.

(2) *Pool Deck* means the surface areas serving the PUBLIC SWIMMING POOL, beyond PERIMETER DECK, which is expected to be regularly trafficked and made wet by BATHERS.

(l) *Department* means the Guam Department of Public Health and Social Services.

(m) *Diaper-Changing Station* means a hygiene station that includes a diaper-changing unit, handwashing sink, soap and dispenser, a means for drying hands, trash receptacle, and disinfectant products to clean after use.

(n) *Diaper-Changing Unit* means a diaper-changing surface that is part of a DIAPER-CHANGING STATION.

(o) *Director* means the Director of the Department of Public Health and Social Services or his/her designated representative.

(p) *Disinfection* means a treatment that kills or irreversibly inactivates microorganisms (e.g., bacteria, viruses, and parasites); in water treatment, a chemical (commonly CHLORINE, chloramine, or ozone) or physical process (e.g., ultraviolet radiation) can be used.

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(q) *Enclosure* means an uninterrupted constructed feature or obstacle used to surround and secure an area that is intended to deter or effectively prevent unpermitted, uncontrolled, and unfettered access. It is designed to resist climbing and to prevent passage through it and under it.

(r) *Equipment Room* means a space intended for the operation of POOL pumps, filters, heaters, and controllers. This space is not intended for the STORAGE of hazardous POOL chemicals.

(s) *Flat Water* means a PUBLIC SWIMMING POOL in which the water line is static except for movement made by users.

(t) *Flume* means the riding channels of a WATERSLIDE which accommodate riders using or not using mats, tubes, rafts, and other transport vehicles as they slide along a path lubricated by a water flow.

(u) *Foot Bath* means standing water in which BATHERS or PUBLIC SWIMMING POOL staff rinse their feet.

(v) *Ground-Fault Circuit Interrupter or GFCI* means a device for protection of personnel that de-energizes an electrical circuit or portion thereof in the event of excessive ground current.

(w) *Handwashing Station* means a location which has a handwashing sink, adjacent soap with dispenser, hand drying device or paper towels and dispenser, and trash receptacle.

(x) *Hot Water* means a PUBLIC SWIMMING POOL with a water temperature over 90°F.

(y) *Hygiene Facility* means a structure or part of a structure that contains toilet, SHOWER, DIAPER-CHANGING UNIT, HANDWASHING STATION, and dressing capabilities serving BATHERS and PATRONS at a PUBLIC SWIMMING POOL.

(z) *Imminent Health Hazard* means a significant threat or danger to health that is considered to exist when there is evidence sufficient to show that a product, practice, circumstance,

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or event creates a situation that requires immediate correction or cessation of operation to prevent injury based on the number of potential injuries, and the nature, severity, and duration of the anticipated injury.

(aa) *Indoor Swimming Pool* means a physical place that contains one or more PUBLIC SWIMMING POOL and the surrounding BATHER and spectator/stadium seating areas within a structure that meets the definition of "Building" per the International Building Code. It does not include equipment, chemical STORAGE, or BATHER hygiene rooms or any other rooms with a direct opening to the PUBLIC SWIMMING POOL facility. Otherwise known as a natatorium.

(ab) *Inlet* means wall or floor fittings where treated water is returned to the POOL.

(ac) *Lazy River* means a channeled flow of water of near-constant depth in which the water is moved by pumps or other means of propulsion to provide a river-like flow that transports BATHERS over a defined path. A LAZY RIVER may include play features and devices. A LAZY RIVER may also be referred to as a tubing POOL, leisure river, leisure POOL, or a current channel.

(ad) *Oocyst* means the thick-walled, environmentally resistant structure released in the feces of infected animals that serves to transfer the infectious stages of sporozoan parasites (e.g., Cryptosporidium) to new hosts.

(ae) *Patron* means a BATHER or other person or occupant at a PUBLIC SWIMMING POOL who may or may not have contact with PUBLIC SWIMMING POOL water either through partial or total immersion. PATRONS may not have contact with PUBLIC SWIMMING POOL water, but could still be exposed to potential contamination from the PUBLIC SWIMMING POOL facility air, surfaces, or aerosols.

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(af) *Perimeter Gutter System, or Perimeter Overflow System (POS),* means the alternative to SKIMMERS as a method to remove water from the POOL's surface for treatment. The gutter provides a level structure along the POOL perimeter versus intermittent SKIMMERS.

(ag) *Person* means any person, firm, partnership, association, corporation, company, governmental agency, club or organization of any kind.

(ah) *pH* means the negative log of the concentration of hydrogen ions. When water ionizes, it produces hydrogen ions (H^+) and hydroxide ions (OH^-). If there is an excess of hydrogen ions the water is acidic. If there is an excess of hydroxide ions the water is basic. pH ranges from 0 to 14. Pure water has a pH of 7.0. If pH is higher than 7.0, the water is said to be basic, or alkaline. If the water's pH is lower than 7.0, the water is acidic. As pH is raised, more ionization occurs and CHLORINE disinfectants decrease in effectiveness.

(ai) *Plumbing Fixture* means a receptacle, fixture, or device that is connected to a water supply system or discharges to a drainage system or both and may be used for the distribution and use of water; for example: toilets, urinals, SHOWERS, and hose bibs. Such receptacles, fixtures, or devices require a supply of water; or discharge liquid waste or liquid-borne solid waste; or require a supply of water and discharge waste to a drainage system.

(aj) *Public Swimming Pool* means any SWIMMING POOL that is available for public use, whether for a fee or free of charge, or any SWIMMING POOL used by any business, partnership, corporation or PERSON for the use of their customers, clients, guests or employees including, but not limited to: a commercial POOL; a community POOL or POOL at a hotel, motel, resort, auto park, trailer park, apartment house, or other multiple rental unit; private club; public club; and public or private school, gymnasium, or health establishment.

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(ak) *Qualified Lifeguard* means an individual who has successfully completed a lifeguard training course offered by a training agency recognized by the DEPARTMENT, holds a current certificate for such training, has met the pre-service requirements, and is participating in continuing in-service training requirements of the PUBLIC SWIMMING POOL facility.

(al) *Qualified Operator* means an individual responsible for the operation and maintenance of the water and air quality systems and the associated infrastructure of the PUBLIC SWIMMING POOL facility, and who has successfully completed a recognized operator training course to operate a PUBLIC SWIMMING POOL offered by a recognized training agency, and holds a current certificate for such training.

(am) *Recessed Steps* means a way of ingress/egress for a POOL similar to a ladder but the individual treads are recessed into the POOL wall.

(an) *Recirculation System* means the combination of the main drain, gutter or SKIMMER, INLETS, piping, pumps, controls, surge tank or balance tank to provide POOL water recirculation to and from the POOL and the treatment systems.

(ao) *Runout* means that part of a WATERSLIDE where riders are intended to decelerate and/or come to a stop. The RUNOUT is a continuation of the WATERSLIDE FLUME surface.

(ap) *Safety* (as it relates to construction items) means a design STANDARD intended to prevent inadvertent or hazardous operation or use (i.e., a passive engineering strategy).

(aq) *Sanitize* means reducing the level of microbes to that considered safe by public health STANDARDS (usually 99.999%). This may be achieved through a variety of chemical or physical means including chemical treatment, physical cleaning, or drying.

(ar) *Saturation Index* means a mathematical representation or scale representing the ability of water to deposit calcium carbonate, or dissolve metal, concrete or grout.

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(as) *Secondary Disinfection Systems* means those DISINFECTION processes or systems installed in addition to the STANDARD systems required on all PUBLIC SWIMMING POOLS, which are required to be used for increased risk PUBLIC SWIMMING POOLS.

(at) *Shower* means a device that sprays water on the body.

(1) *Cleansing Shower* means a SHOWER located within a HYGIENE FACILITY using warm water and soap. The purpose of these SHOWERS is to remove CONTAMINANTS including perianal fecal material, sweat, skin cells, personal care products, and dirt before BATHERS enter the PUBLIC SWIMMING POOL.

(2) *Rinse Shower* means a SHOWER typically located in the POOL DECK area with ambient temperature water. The main purpose is to remove dirt, sand, or organic material prior to entering the PUBLIC SWIMMING POOL to reduce the introduction of CONTAMINANTS and the formation of DISINFECTION by-products.

(au) *Skimmer* means a device installed in the POOL wall whose purpose is to remove floating debris and surface water to the filter. They shall include a weir to allow for the automatic adjustment to small changes in water level, maintaining skimming of the surface water.

(av) *Slide* means a PUBLIC SWIMMING POOL feature where users slide down from an elevated height into water.

(1) *Drop Slide* means a SLIDE that drops BATHERS into the water from a height above the water versus delivering the BATHER to the water entry point.

(2) *Pool Slide* means a SLIDE having a configuration as defined in The Code of Federal Regulations *(CFR)* Chapter II, Title 16, Part 1207 by CSPC, or is similar in construction to a playground slide used to allow users to slide from an elevated height to a

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POOL. They shall include children's (tot) SLIDES and all other non-FLUME SLIDES that are mounted on the POOL DECK or within the basin of a PUBLIC SWIMMING POOL.

(3) *Waterslide* means a SLIDE that runs into a LANDING POOL or RUNOUT through a fabricated channel with flowing water.

(aw) *Spa* means a structure intended for either warm or cold water where prolonged exposure is not intended. SPA structures are intended to be used for bathing or other recreational uses and are not usually drained and refilled after each use. It may include, but is not limited to, hydrotherapy, air induction bubbles, and recirculation.

(ax) *Standard* means something established by authority, custom, or general consent as a model or an example.

(ay) *Storage* means the condition of remaining in one space for one hour or more. Materials in a closed pipe or tube awaiting transfer to another location shall not be considered to be stored.

(az) *Substantial Alteration* means the alteration, modification, or renovation of a PUBLIC SWIMMING POOL where the total cost of the work exceeds 50% of the replacement cost of the PUBLIC SWIMMING POOL.

(ba) *Swimming Pool, or Pool,* means any artificial structure, basin, chamber, or tank constructed of impervious material used or intended to be used for swimming, diving, or recreational bathing. It does not include conventional bathtubs where the primary purpose is the cleaning of the body, or individual therapeutic tubs.

(1) *Diving Pool* means a PUBLIC SWIMMING POOL used exclusively for diving.

(2) *Landing Pool* means a PUBLIC SWIMMING POOL or designated section of a PUBLIC SWIMMING POOL located at the exit of one or more WATERSLIDE FLUMES. It is the

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body of water intended and designed to receive a BATHER emerging from the FLUME for the purpose of terminating the slide action and providing a means of exit to a DECK or walkway area.

(3) *Skimmer Pool* means a POOL using a SKIMMER system.

(4) *Surf Pool* means any POOL designed to generate waves dedicated to the activity of surfing on a surfboard or analogous surfing device commonly used in the ocean and intended for sport, as opposed to general play intent for WAVE POOLS.

(5) *Therapy Pool* means a POOL used exclusively for aquatic therapy, physical therapy, and/or rehabilitation to treat a diagnosed injury, illness, or medical condition, wherein the therapy is provided under the direct supervision of a licensed physical therapist, occupational therapist, or athletic trainer. This could include wound patients or immunocompromised patients whose health could be impacted if there is not additional water quality protection.

(6) *Wading Pool* means an artificial basin, chamber, or tank constructed of impervious material used, or intended to be used, for wading by small children and having a maximum depth not to exceed 18 inches at the deepest point and not more than 12 inches in depth at the side walls.

(7) *Wave Pool* means any POOL designed to simulate breaking or cyclic waves for purposes of general play. A WAVE POOL is not the same as a SURF POOL, which generates waves dedicated to the activity of surfing on a surfboard or analogous surfing device commonly used in the ocean and intended for sport as opposed to general play intent for WAVE POOLS.

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(bb) *Theoretical Peak Occupancy* means the anticipated peak number of BATHERS in a PUBLIC SWIMMING POOL, or the anticipated peak number of occupants of the DECKS of a PUBLIC SWIMMING POOL facility. This is the lower limit of peak occupancy to be used for design purposes for determining services that support occupants. THEORETICAL PEAK OCCUPANCY is used to determine the number of SHOWERS. For PUBLIC SWIMMING POOL, the THEORETICAL PEAK OCCUPANCY is calculated around the type of water use or space.

(bc) *Turnover, or Turnover Rate,* means the period of time, usually expressed in hours, required to circulate a volume of water equal to the capacity of the PUBLIC SWIMMING POOL.

(bd) *Variance* means a written document issued by the DIRECTOR, not his/her representative, that authorizes a modification or waiver of one or more requirements of these rules and regulations if, in the opinion of the DIRECTOR, a health hazard or nuisance will not result from the modification or waiver.

§4605. Scope.

These rules and regulations shall apply to all PUBLIC SWIMMING POOLS as defined herein, except private SWIMMING POOL maintained by an individual for the use of his family and friends.

These rules and regulations shall apply to all auxiliary structures and equipment thereof such as POOL DECKS, diving boards, locker rooms, SHOWER and dressing rooms, toilet facilities, and filtration, pumping, piping, disinfecting, and SAFETY equipment provided and maintained in connection with such facility.

§4606. Sanitary Permit.

(a) No PERSON shall directly or indirectly in any manner, conduct, control, manage, maintain, or operate a PUBLIC SWIMMING POOL unless a valid Sanitary Permit issued by the DEPARTMENT to operate such a facility has been obtained and posted. Any PERSON, before

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constructing a new PUBLIC SWIMMING POOL, or making SUBSTANTIAL ALTERATION of an existing facility shall first submit plans and specifications of such facility or changes to the DIRECTOR for approval.

(b) An application for a Sanitary Permit to operate all new or existing PUBLIC SWIMMING POOL shall be made in writing on a form prescribed by the DEPARTMENT, signed by the applicant or his authorized agent, and shall contain such information that will determine that the facility and its operation are in compliance with the applicable provisions of these rules and regulations.

(c) Before the application for a Sanitary Permit shall be approved, the DEPARTMENT shall verify that the facility meets the minimum sanitary requirements and STANDARDS by means of a pre-operational inspection. This shall include the access onto premises for assessment, inspection, and/or investigation.

(d) Before a pre-operational inspection is conducted, plans and specifications shall be submitted to the DIRECTOR in accordance with the requirements established in these rules and regulations, which shall include the following:

(1) Site information indicating, at a minimum, the location of all utilities, wells, topography, natural water features, and potential sources of surface drainage and pollution which may affect the proposed PUBLIC SWIMMING POOL;

(2) A plot plan including a general map and detailed scaled drawings of the PUBLIC SWIMMING POOL site plan or floor plan with detailed locations of each PUBLIC SWIMMING POOL and related features, and locations of all water supply facilities, sources of drinking water, public or private sewers and relative elevations of paved or

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other walkways and the EQUIPMENT ROOM floor with the elevations of storm and sanitary sewer inverts and street grade;

(3) Detailed scaled and dimensional drawings for each individual PUBLIC SWIMMING POOL showing the following:

(i) Location and type of INLETS, overflows, drains, suction outlets, overflow gutters or devices, piping, POOL water elevation, lighting, POOL markings, surface materials, and POOL features such as ladders, stairs, diving boards, SLIDES, and play features;

(ii) Location and type of DECK, curb, or walls enclosing the POOL, DECK drains, walkways, flooring, area finishes, entries and exits, hose bibs, fences, telephones, and area lighting;

(iii) A flow diagram showing the location, plan, elevation, and schematics of filters, pumps, chemical feeders and interlocks, chemical controllers and interlocks, supplementary DISINFECTION system, heaters, surge tanks, BACKFLOW prevention assemblies, valves, piping, flow meters, gauges, thermometers, test cocks, sight glasses, and drainage system;

(iv) A schematic layout of the EQUIPMENT ROOM showing accessibility for installation and maintenance, and CHEMICAL STORAGE SPACES;

(v) Location and number of HYGIENE FACILITIES provided including dressing rooms, lockers, SHOWERS, handwashing facilities, toilet fixtures, and DIAPER-CHANGING STATIONS; and

(vi) Layout for zones of PATRON surveillance as specified in §4637 (e) showing features or design configurations that can impact PATRON surveillance.

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§4607. Public Swimming Pool Design Standards and Construction.

(a) PUBLIC SWIMMING POOLS shall be constructed of reinforced concrete or impervious and structurally sound materials which provide a smooth, easily cleaned, watertight structure capable of withstanding the anticipated stresses for full and empty conditions.

(b) All materials shall be inert, non-toxic, resistant to corrosion, impervious, enduring, and resistant to damages related to the environmental conditions of Guam.

(c) All corners formed by intersection of walls and floors shall be rounded.

(d) Wood, sand, or earth are not permitted as an interior finish in PUBLIC SWIMMING POOL construction.

(e) A PUBLIC SWIMMING POOL and all associated structures thereto shall be so shaped and arranged that maintenance of safe and sanitary conditions, and recirculation of the water, are not impaired. An obstruction shall not extend into or above the PUBLIC SWIMMING POOL so as to create a SAFETY hazard.

(f) The finished surface of the PUBLIC SWIMMING POOL wall and floor shall be smooth, without cracks or open joints, non-slip, easily cleaned and light colored, except that a marking may be inserted against a light background.

(g) PUBLIC SWIMMING POOL floors in areas less than three feet deep, underwater benches, and all other floors and surfaces required to be slip-resistant shall have a minimum dynamic coefficient of friction at least equal to the requirements of ANSI A137.1-2012 of 0.42 as measured by the DCOF AcuTest.

(h) A hydrostatic relief valve and/or suitable under drain system shall be provided where the water table exerts hydrostatic pressure to uplift the PUBLIC SWIMMING POOL when empty or drained.

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(i) All vertical walls shall have a durable finish suitable for regular scrubbing and cleaning at the waterline. SKIMMER POOLS shall have a six-inch to 12-inch high waterline finish, and gutter or PERIMETER OVERFLOW SYSTEM shall have a minimum finish height of two inches.

(j) If dark colors are used for the POOL finish, these colors shall not extend more than 12 inches below the waterline.

(k) Except for special use POOLS, the slope of the floor for all POOLS with water depths under five feet shall not exceed one-foot vertical drop for every 12-feet horizontal, and shall not exceed one-foot vertical to three-feet horizontal for POOLS with water depths five foot and greater.

(l) Except as provided in (m) of this Section, floors and walls below the water line shall be white or light pastel in color such that from the POOL DECK a BATHER is visible on the POOL floor and the following items can be identified:

(1) Algae growth, debris or dirt within the POOL, and

(2) Cracks in the surface finish of the POOL, and

(3) Marker tiles defined in §4620.

(m) An exception for the color and finish requirement in (l) of this Section shall be made for the following PUBLIC SWIMMING POOL components:

(1) Competitive lane markings;

(2) Dedicated competitive diving well floors;

(3) Step or bench edge markings;

(4) POOLS shallower than 24 inches;

(5) Water line tiles;

(6) WAVE POOL and SURF POOL depth change indicator tiles; or

(7) Other designs approved by VARIANCE.

PROPOSED

(n) PUBLIC SWIMMING POOLS shall be free of recessed areas which will interfere with circulation of the water and with skimming action and SAFETY supervision of BATHERS.

(o) PERIMETER OVERFLOW GUTTERS and/or SKIMMERS meeting the requirements of §4613 and §4614 shall be required on all PUBLIC SWIMMING POOLS.

(p) Diving boards shall be permitted only when the diving envelope conforms to the STANDARDS of the certifying agency that regulates competitive diving at the PUBLIC SWIMMING POOL. If the PUBLIC SWIMMING POOL does not have competitive diving or certifying agency that regulates competitive diving, then the diving envelope shall conform to the diving envelope STANDARDS of Table 1, Table 2, Figure 1, and Figure 2. Starting platforms shall only be used for competitive swimming and training, and under the direct supervision of a coach or instructor. Starting platforms shall be removed, if possible, or prohibited from use during all recreational or non-competitive swimming activity by covering platforms with a manufacturer-supplied platform cover or with another means or device that is readily visible and clearly prohibits use.

Table 1. Diving Board Dimensions

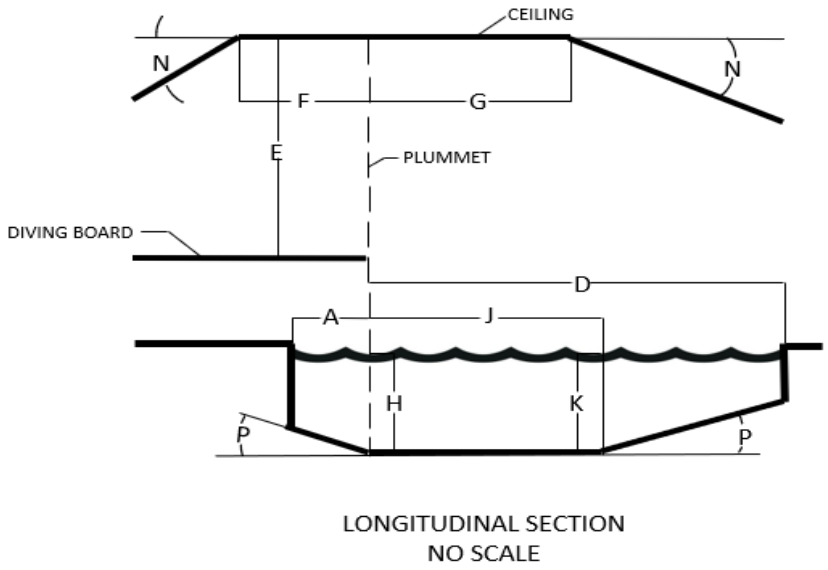
Board Height	1.64 ft.	2.46 ft.	3.28 ft.	3.84 ft.
Board Length	10.0 ft.	12.0 ft.	16.0 ft.	16.0 ft.
Board Width	20.0 in.	20.0 in.	20.0 in.	20.0 in.

PROPOSED

Table 2. Dimensions of Components Related to Diving Wells					
Letters below refer to Figures 1 & 2		Minimum Dimensions			
A	**Distance from plummet back to pool wall**	3.0 ft.	4.5 ft.	6.0 ft.	6.0 ft.
B	**Distance from plummet to pool wall at side**	10.0 ft.	10.0 ft.	10.0 ft.	11.5 ft.
C	**Distance from plummet to adjacent plummet**	8.83 ft.	8.83 ft.	8.83 ft.	8.54 ft.
D	**Distance from plummet to pool wall ahead**	26.0 ft.	27.83 ft.	29.58 ft.	33.67 ft.
E	**Height, board to ceiling at plummet & distances F and G**	16.0 ft.	16.0 ft.	16.0 ft.	16.0 ft.
F	**Clear overhead distance behind and each side of plummet**	8.0 ft.	8.0 ft.	8.0 ft.	8.0 ft.
G	**Clear overhead distance ahead of plummet**	16.0 ft.	16.0 ft.	16.0 ft.	16.0 ft.
H	**Depth of water at plummet**	9.5 ft.	10.75 ft.	12.0 ft.	12.5 ft.
J	**Distance ahead of plummet to depth K**	12.0 ft.	14.25 ft.	16.5 ft.	19.75 ft.
K	**Depth at distance J ahead of plummet**	8.75 ft.	10.0 ft.	11.28 ft.	12.17 ft.
L	**Distance at each side of plummet to depth M**	8.0 ft.	8.13 ft.	8.25 ft.	9.92 ft.
M	**Depth at distance L on each side of plummet**	9.08 ft.	10.33 ft.	11.63 ft.	12.17 ft.
N	**Maximum slope to reduce height E**	30°	30°	30°	30°
P	**Maximum floor slope to reduce depth ahead of K, to the sides of M, or back to pool wall behind H**	3:1	3:1	3:1	3:1

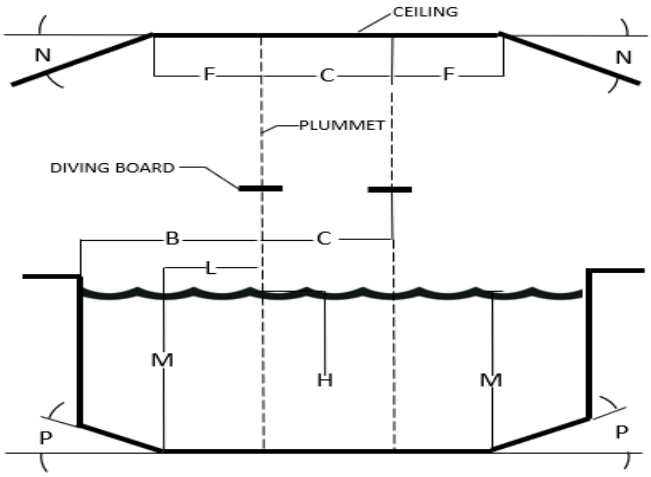
PROPOSED

Figure 1. Diving Platform Longitudinal Section



LONGITUDINAL SECTION
NO SCALE

Figure 2. Diving Platform Cross Section



CROSS SECTION
NO SCALE

(q) Where applicable, all equipment used, or proposed to be used, in PUBLIC SWIMMING POOLS shall be listed and labeled by an ANSI accredited certification organization, or have EPA registration, as applicable.

(r) At least one space dedicated to CHEMICAL STORAGE SPACE shall be provided to allow safe STORAGE of the chemicals present. An emergency eye wash station shall be provided in all CHEMICAL STORAGE SPACES. The CHEMICAL STORAGE SPACE shall be separate from the EQUIPMENT ROOM.

(s) It shall be the responsibility of the Sanitary Permit holder of the PUBLIC SWIMMING POOL to comply with all applicable codes (i.e., STANDARDS of Guam Fire Department and Guam Environmental Protection Agency) when storing chemicals necessary for maintenance purposes, operation, or sanitation of equipment in the EQUIPMENT ROOM.

(t) A carbon monoxide detector with local alarming, listed and labeled in accordance with UL 2075, shall be installed in all EQUIPMENT ROOMS and rooms adjacent to spaces containing fuel-burning equipment or vents carrying the products of combustion.

(u) Floors of an interior CHEMICAL STORAGE SPACE and EQUIPMENT ROOM shall be of concrete or other suitable material having a smooth, slip resistant finish that is easily cleanable. Openings or gaps on floors, walls, or ceilings shall be permanently sealed against air leakage.

(v) All doors opening into CHEMICAL STORAGE SPACES shall be equipped with permanent signage warning against unauthorized entry, and specifying the expected hazards and the location of the associated Safety Data Sheets. Doors shall be constructed of corrosion-resistant materials and automatic lock to prevent unauthorized entry.

PROPOSED

§4608. Water Supply.

(a) The water supply serving the PUBLIC SWIMMING POOL and all PLUMBING FIXTURES including drinking fountains, handwashing sinks, and SHOWERS shall come from an approved public water system.

(b) The water supply shall have sufficient capacity to simultaneously serve all PLUMBING FIXTURES.

(c) If a spill spout is used at a PUBLIC SWIMMING POOL, the fill spout shall be located so that it is not a SAFETY hazard to BATHERS. The open end of the fill spouts shall not have sharp edges or protrude more than two inches beyond the edge of the POOL. The open end shall be separated from the water by an air gap of at least 1 ½ pipe diameters measured from the pipe outlet to the POOL.

(d) The potable water supply serving a PUBLIC SWIMMING POOL shall be protected against BACKFLOW consisting of either of the following:

(1) An acceptable air gap consisting of a vertical distance of not less than two pipe diameters of the water supply pipe or six inches, whichever is greater, over the lowest free-flowing discharge point of the receiving pipe, tank, or vessel. Splash guards that are open to the atmosphere may be used around the air gap; or

(2) Where permitted, an approved reduced pressure zone BACKFLOW preventer installed according to the plumbing code and the DEPARTMENT.

§4609. Wastewater Disposal.

(a) The sewer system shall be adequate to serve all PLUMBING FIXTURES in the facility including the SHOWERS, toilets, and related structures.

PROPOSED

(b) There shall be no physical connection between the sewer system and any drain from the PUBLIC SWIMMING POOL or RECIRCULATION SYSTEM. Any PUBLIC SWIMMING POOL or gutter drain when discharged to the sewer system, storm drain, or other approved natural drainage course shall connect through a suitable air gap so as to preclude possibility of backup of sewage or waste into the PUBLIC SWIMMING POOL piping system.

(c) The sanitary sewer serving the PUBLIC SWIMMING POOL and auxiliary facilities shall discharge to the public sewer system wherever possible. Where no such sewer is available, the connection shall be made to a suitable disposal plant designed, constructed, and operated properly.

§4610. Depth Markings and Lines.

(a) Depth of water shall be plainly marked at or above the water surface on the vertical wall next to the PUBLIC SWIMMING POOL, at maximum and minimum depths, at the points of break between the deep and shallow portions, on both sides and at each end of the POOL, and spaced at not more than twenty-five feet intervals measured peripherally. In addition, for water less than five feet in depth, the depth shall be marked at one-foot depth intervals. The depth in the diving areas shall be appropriately marked.

(b) Depth markers shall be positioned to be read from within the POOL and while standing on the DECK facing the POOL. Depth markers shall be in numerals of four inches minimum height and a color contrasting with background.

(c) Depth markers shall be marked in units of feet and inches. Abbreviations of "FT" and "IN" may be used in lieu of "FEET" and "INCHES." Symbols for feet *(')* and inches *(")* shall not be permitted on water depth signs. Metric units may be provided in addition to – but not in lieu of – units of feet and inches.

PROPOSED

(d) Lane lines or other markings on the bottom of a POOL shall not exceed ten inches in width. Decorative designs on the bottom or walls which give the illusion of being or mistaken for the human form are prohibited.

(e) For POOL water depths five feet or shallower, all DECK depth markers required in these rules and regulations shall be provided with "NO DIVING" warning signs along with the universal international symbol for "NO DIVING."

(f) For POOLS deeper than five feet, a line of contrasting color, not less than two inches and not more than six inches in width, shall be clearly and permanently installed on the POOL floor at the shallow side of the break in the floor slope, and extend up the POOL walls to the waterline.

(g) One foot to the shallow water side of the break in floor slope and contrasting band, a SAFETY float rope shall extend across the POOL surface with the exception of WAVE POOLS, SURF POOLS, and WATERSLIDE LANDING POOLS.

§4611. Recirculation System.

(a) A RECIRCULATION SYSTEM consisting of one or more pumps, pipes, return INLETS, suction outlets, tanks, filters, water conditioning and DISINFECTION equipment, and other accessory equipment shall be provided to ensure effective distribution of treated water and maintain a uniform disinfectant residual and pH throughout the PUBLIC SWIMMING POOL.

(b) All PUBLIC SWIMMING POOLS shall comply with the maximum allowable TURNOVER times on Table 3 and Table 4.

Table 3. Turnover Times

Type of Public Swimming Pool	Turnover Maximum
Diving Pools	2 hours
Lazy River	2 hours
Plunge Pools	1 hour
Runout Slide	1 hour
Wading Pools	1 hour

PROPOSED

Wave Pools	2 hours
All Other Pools	6 hours

Table 4. Turnover Times for Spa and Therapy Pools		
Temperature	**Load**	**Turnover Maximum**
≤ 72°-93°F	> 2500 gals/person	4 hours or less
≤ 72°-93°F	> 450 gals/person	2 hours or less
≤ 72°-93°F	≤ 450 gals/person	1 hour or less
≥ 93-104 F	All	0.5 hours or less

(c) The TURNOVER time shall be calculated based on the total volume of water divided by the flow rate through the filtration process.

(d) For gutter or SKIMMER POOLS with main drains, the required recirculation flow shall be as follows during normal operation:

(1) At least 80% of the flow through the POS, and

(2) No greater than 20% through the main drain.

(e) RECIRCULATION SYSTEM piping shall be designed so that water velocities do not exceed eight feet per second on the discharge side of the recirculation pump and suction piping shall be sized so that the water velocity does not exceed six feet per second unless alternative values have proper engineering justification.

(f) Piping shall be of non-toxic material, resistant to corrosion, and able to withstand operating pressures, chemicals, and temperatures. Piping and piping system component materials shall be listed and labeled to NSF/ANSI Standard 14, NSF/ANSI Standard 50, and NSF/ANSI Standard 61, as applicable. All piping shall be clearly marked to indicate type or source of water and direction of flow with clear labeling and/or color coding.

(g) All valves shall be clearly identified with a brass tag, plastic laminate tags, or permanently affixed alternate.

PROPOSED

(h) All recirculation pumps shall meet the minimum Net Positive Suction Head requirement for the system. Pumps shall be of adequate capacity to provide the required number of TURNOVERS of PUBLIC SWIMMING POOL water as specified in (b) of this Section and whenever possible shall be so located as to eliminate the need for priming. If the pump or suction is located above the overflow level of the POOL, the pump shall be self-priming. The pump or pumps shall be capable of providing flow adequate for the back-washing of filters. Where vacuum filters are used, a vacuum limit switch shall be provided on the pump suction line. The vacuum limit switch shall be set for a maximum vacuum of 18 inches of mercury.

(i) The RECIRCULATION SYSTEM shall include a strainer or screen device on the suction side to prevent hair, lint, and foreign objects from reaching the pump and filters. Strainers shall be corrosion-resistant with openings not more than 1/8 inch in size, providing a free-flow area at least four times the area of the pump suction line, and shall be readily accessible and cleaned as necessary to maintain proper skimming. An extra strainer basket shall be provided with each strainer device to permit continuity of service.

(j) A cleaning system shall be provided to remove dirt from the bottom of the POOL. The cleaning system shall not create an entanglement or suction entrapment hazard or interfere with the operation or use of the PUBLIC SWIMMING POOL. Use of integral vacuum systems, meaning a vacuum system that uses the main circulating pump or a dedicated vacuum pump connect to the POOL with PVC piping and terminating at the POOL with a flush-mounted vacuum port fitting, shall be prohibited.

(k) A flow meter accurate within +/- 5% of the actual design flow shall be provided for each filtration system. Flow meters shall be listed and labeled to NSF/ANSI Standard 50 by an ANSI-accredited certification organization. When used with sand filters, the flow meter shall be

PROPOSED

located at a point so that the rate of the backwash will also be indicated. The flow meter shall be capable of measuring flows at least twenty percent over the design flow rate and shall be easy to read. Mercury manometers must be equipped with return wells to keep mercury from being blown out of the manometer.

(l) All components of the filtration and RECIRCULATION SYSTEMS shall be kept in continuous operation 24 hours per day. The system flow rate shall not be reduced more than 25% lower than the minimum design requirements and only reduced when the POOL is unoccupied.

§4612. Inlets and Outlets.

(a) Effective distribution of treated water shall be accomplished by either a continuous POS with integral INLETS or by means of directionally adjustable INLETS to facilitate circulation of the water and maintain a disinfectant residual as required by §4619 uniformly throughout the entire PUBLIC SWIMMING POOL.

(b) INLETS shall be hydraulically sized to provide the design flow rates for each POOL area of multi-zone POOLS based on the required design TURNOVER RATE for each zone.

(c) POOLS shall use wall and/or floor INLETS to provide adequate mixing. Wall INLETS shall be flushed against the POOL wall; submerged at least 24 inches below the water level; spaced no greater than 20 feet apart; placed within five feet of each corner of the POOL; placed at least five feet from a SKIMMER; and placed in each recessed or isolated area of the POOL. INLETS shall not protrude more than one and ¼ inches beyond the wall surface into the POOL and shall be rounded and smooth so as not to produce a SAFETY hazard.

(d) For POOLS greater than 50 feet wide, floor INLETS shall be required. Floor INLETS shall be flush with the bottom of the POOL; spaced no greater than 20 feet apart; row of INLETS

PROPOSED

located within 15 feet of each side wall; and spaced no greater than 25 feet from the nearest side walls when combined with wall INLETS.

(e) A minimum of two hydraulically balanced filtration system outlets are required in the bottom of all PUBLIC SWIMMING POOLS. The outlets shall be connected to a single main suction pipe by branch lines piped to provide hydraulic pressure balance between the drains. The branch lines shall not be valved so as to be capable of operating independently. Outlets shall be equally spaced from the POOL side walls and shall be located no less than three feet apart, measuring between the centerlines of the suction outlet covers. Suction outlets, including sumps and covers, shall be listed and labeled to the requirements of ANSI/APSP-16 2011. The bottom drain and recirculation outlets shall be covered with grates or other protective devices which cannot be removed except with tools. The slots or openings of these covers shall not exceed ½ inch in the smaller dimension.

§4613. Perimeter Overflow Gutters.

(a) PERIMETER OVERFLOW GUTTERS shall extend completely around the PUBLIC SWIMMING POOL, except at steps or recessed ladders. The overflow gutter may also serve as a step or a handhold, provided that the gutter is provided with a grating or cover and conforms to all construction and dimensional requirements herein specified.

(b) PERIMETER OVERFLOW GUTTERS shall be capable of continuously removing at least 125 percent of the approved total recirculation flow rate chosen by the designer.

(c) Gutter water shall be returned to the filter, or to waste, at the discretion of the POOL OPERATOR.

(d) All overflow gutters shall be connected to the RECIRCULATION SYSTEM through a properly designed surge tank. A vacuum gravity filter box may be used as a surge tank. The

PROPOSED

gutter system shall have an effective net surge capacity of at least one gallon per each square foot of POOL surface area. The surge tank's minimum, maximum, and normal POOL operating water levels shall be marked on the tank so as to be readily visible for inspection. Surge tanks shall have overflow pipes to convey excess water to waste via an air gap or other approved BACKFLOW prevention device.

(e) Gutters shall be level with a tolerance of +/- 1/16 of an inch around the perimeter of the PUBLIC SWIMMING POOL. The opening into the gutter beneath the coping shall not be less than four inches wide with a depth of at least three inches. Where large gutters are used, they shall be designed to prevent entrance or entrapment of BATHERS' arms and legs. The overflow edge or lip shall be rounded and not thicker than two and ½ inches. The overflow outlets shall be provided with outlet pipes which shall in any case be at least two inches in diameter.

(f) The outlet fittings shall have a clear opening in the grating of at least equal to one and ½ times the cross-sectional area of the outlet pipe. The outlet shall be spaced not more than three feet on centers in flat gutters. If the bottom of the gutter slopes is at least 1/3 of an inch per foot from a crown toward the outlet fittings, the outlets may be placed not over fifteen feet on the center. The use of continuous-flow gutters with single or multiple outlets will be acceptable provided they are properly designed for the POOL, self-cleansing, and capable of maintaining an effective skimming action without discharging back into the POOL.

(g) Nothing in this Section shall preclude the use of roll-out gutters or DECK-level type PUBLIC SWIMMING POOLS. Such designs shall conform to the general provisions relating to overflow rates. A curb, if used, shall be twelve inches wide and from three inches to six inches above the DECK. The gutter must be wide enough to provide safe footing.

(h) Gutters shall permit ready inspection, cleaning, and repair.

PROPOSED

§4614. Skimmers.

(a) SKIMMERS are permitted on PUBLIC SWIMMING POOLS which are not more than thirty feet wide and not more than 1,600 square feet, provided an approved handhold is installed completely around the POOL. SKIMMERS shall be installed in each corner, or in the coves of a free-form POOL, and at twenty to forty-foot intervals around the POOL perimeter. Handholds shall consist of bull-nosed coping not over two and ½ inches thick for the outer two inches or an equivalent approved handhold. The handholds must be no more than nine inches above the normal water line.

(b) The SKIMMER system shall be designed to handle up to 100% of the total recirculation flow rate chosen by the designer. SKIMMERS shall be so located as to provide effective skimming of the entire water surface and so as not to be affected by restricted flow in areas such as near steps and within small recesses.

(c) There shall be at least one such SKIMMER for each five hundred square feet of POOL surface area or fractional part thereof. Additional SKIMMERS may be required to achieve effective skimming under site-specific conditions and/or to comply with all applicable building codes.

(d) Hybrid systems that incorporate surge weirs in the overflow gutters to provide for in-POOL surge shall meet all of the requirements specified for overflow gutters (with the exception of the surge or balance tank, since the surge capacity requirement will be alternately met by the in-POOL surge capacity). The number of surge weirs shall be based on the individual surge weir capacity and the operational apportionment of the design recirculation flow rate.

(e) The flow rate for the SKIMMERS shall comply with manufacturer data plates or NSF/ANSI 50, including Annex K.

PROPOSED

(f) Each SKIMMER shall have a weir that adjusts automatically to variations in water level over a range of at least four inches.

(g) Each SKIMMER shall be equipped with a trimmer valve capable of distributing the total flow between individual SKIMMERS.

(h) The base of each SKIMMER shall be level with all other SKIMMERS in the POOL within a tolerance of +/- ¼ of an inch.

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

(j) The SKIMMER shall be constructed of sturdy, corrosion-resistant materials.

(k) There shall be some means of shutting off each SKIMMER.

§4615. Filter Requirements.

(a) General

(1) Filtration shall be required for all PUBLIC SWIMMING POOLS that recirculate water.

(2) The filter shall be designed, constructed, and operated so that structural or functional failures will not permit passage of unfiltered water.

(3) All filters shall be listed and labeled to NSF/ANSI 50 by an ANSI-accredited certification organization.

(4) All filters shall be so designed and installed with adequate clearance and facilities for ready and safe inspection, maintenance, disassembly, and repair.

(5) Filters should be used with the appropriate filter media as recommended by the filter manufacturer for maximum clarity and cycle length for PUBLIC SWIMMING POOL use. A means and access for easy removal of filter media shall be required.

PROPOSED

(b) Granular Media Filters

(1) The granular media filter system shall have valves and piping to allow isolation, venting, complete drainage (for maintenance or inspections), and backwashing of individual filters.

(2) Filtration accessories shall include with the influent and effluent pressure gauges, backwash sight glass or other means to view backwash water clarity, and-manual air relief system.

(3) High-rate granular media filters shall be designed to operate at no more than 15 gallons per minute per square foot when a minimum bed depth of 15 inches is provided per manufacturer. When a bed depth is less than 15 inches, filters shall be designed to operate at no more than 12 gallons per minute per square foot.

(4) The granular media filter system shall be designed to backwash each filter at a rate of at least 15 gallons per minute per square foot of filter bed surface area, unless explicitly prohibited by the filter manufacturer and approved at an alternate rate as specified in their NSF/ANSI 50 listing.

(5) The minimum depth of filter media cannot be less than the depth specified by the manufacturer.

(6) Influent and effluent pressure gauges shall have the capability to measure up to a 20 pounds per square inch increase in the differential pressure across the filter bed in increments of one pound per square inch or less.

(7) If coagulant feed systems are used, they shall be installed with the injection point located before the filters as far ahead as possible, with electrical interlocks in accordance with §4618 (b).

PROPOSED

(c) Precoat Filters

(1) The design filtration rate for vacuum precoat filters shall not be greater than either two gallons per minute per square foot or two and ½ gallons per minute per square foot when used with a continuous precoat media feed (commonly referred to as "body-feed").

(2) The design filtration rate for pressure precoat filters shall not be greater than two gallons per minute per square foot of effective filter surface area.

(3) The filtration surface area shall be based on the outside surface area of the media with the manufacturer's recommended thickness of precoat media and consistent with their NSF/ANSI 50 listing and labeling.

(4) The pre-coat process shall follow the manufacturer's recommendations and requirements of NSF/ANSI Standard 50.

(d) Cartridge Filters

(1) The design filtration rate for surface-type cartridge filter shall not exceed 0.30 gallons per minute per square foot.

(2) Filter cartridges shall be supplied and sized in accordance with the filter manufacturer's recommendation for PUBLIC SWIMMING POOL use.

(3) One complete set of spare cartridges shall be maintained on site in a clean and dry condition.

§4616. Pool Access and Egress.

(a) Each POOL shall have a minimum of two means of access and egress with the exception of WATERSLIDE LANDING POOLS, WATERSLIDE RUNOUTS, and WAVE POOLS.

PROPOSED

Acceptable means of access/egress shall include stairs/handrails, grab rails/RECESSED STEPS, ladders, ramps, swim outs, and zero-depth entries.

(b) If the POOL is over thirty feet wide, such means of access/egress shall be installed on each side of the POOL and shall be placed not more than 75 feet apart.

(c) Where provided, stairs shall be constructed with slip-resistant materials. The leading horizontal and vertical edges of stair treads shall be outlined with slip-resistant contrasting tile or other permanent marking of not less than one inch and not greater than two inches.

(d) Where stairs are provided in POOL ~~the~~ water depths greater than five feet, they shall be recessed into the side of the POOL, not protrude into the swimming area, and the lowest tread shall be not less than four feet below normal water elevation.

(e) Traditional rectangular stairs shall have a minimum uniform horizontal tread depth of 12 inches, and a minimum unobstructed tread width of 24 inches.

(f) Dimensions of stair treads for other types of stairs shall conform to the STANDARDS of Table 5, Figure 3, Figure 4, and Figure 5.

Table 5. Required Dimensions for Stairs, Treads, and Risers					
Dimensions	T-1 Standard	T-1 Convex, Concave, Triangular	T-2	W-1	H-1
Minimum	12 inches	21 inches	12 inches	24 inches	6 inches
Maximum	18 inches	24 inches	16 inches	N/A	12 inches

PROPOSED

Figure 3. Stairs, Treads, and Risers

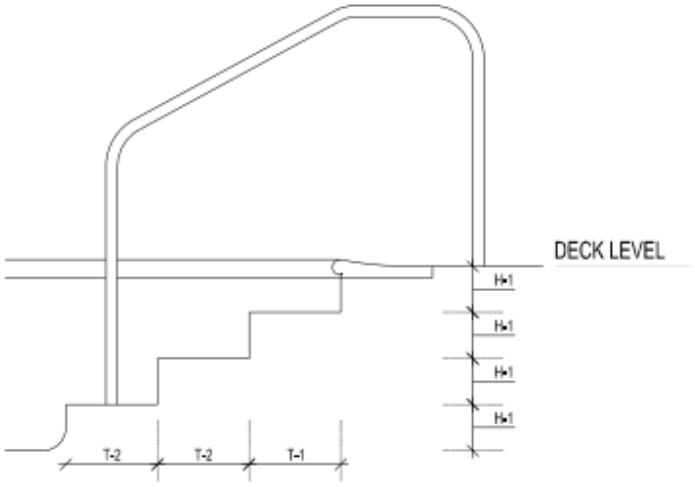


Figure 4. Stair Treads

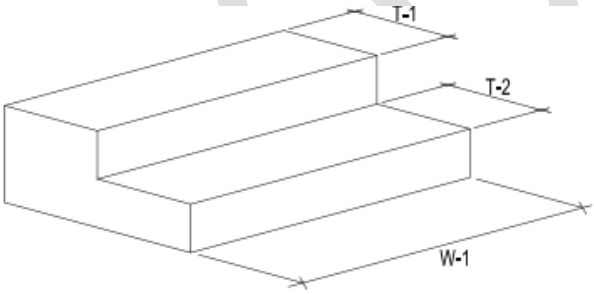
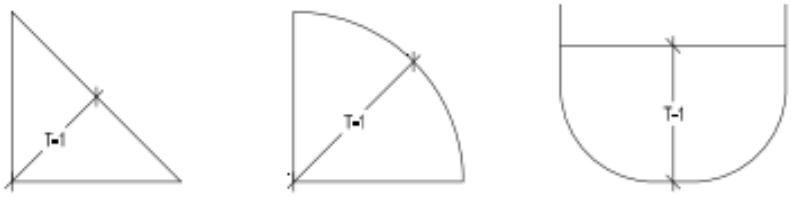


Figure 5. Unique Stair Treads



(g) The top surface of the uppermost stair tread shall be located not more than 12 inches below the POOL coping or DECK.

(h) Stair risers shall have a minimum uniform height of six inches and a maximum height of 12 inches, with a tolerance of ½ of an inch between adjacent risers.

(i) Stairs shall not be used underwater to transition between two sections of POOL of different depths.

(j) PUBLIC SWIMMING POOL ladders shall be corrosion-resistant and shall be anchored securely to the DECK. Ladders shall have two handrails with not less than 17 inches and not more than 24 inches horizontal clear space between them. Ladders and handrails shall be designed to resist a load of 50 pounds per linear foot applied in any direction and independently a single concentrated load of 200 pounds applied in any direction at any location. The upper railing surface of handrails shall extend above the POOL coping or DECK a minimum of 28 inches. The clear space between handrails and the POOL wall shall be not less than three inches and not more than six inches.

(k) Ladder treads shall be slip-resistant and shall have a minimum horizontal tread depth of 1 and ½ inches. The distance between the horizontal tread and POOL wall shall not be greater than four inches. Ladder treads shall be uniformly spaced not less than seven inches and not more than 12 inches vertically at the handrails. The top surface of the upmost ladder tread shall be located not more than 12 inches below the POOL coping, gutter, or DECK.

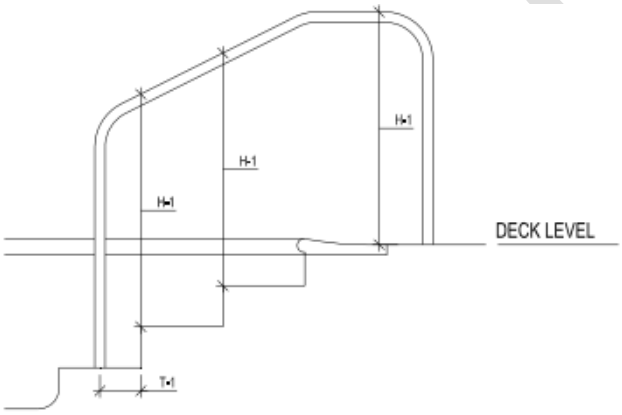
(l) Stairs wider than five feet shall have at least one additional handrail for every 12 feet of stair width.

(m) Dimensions of handrails shall conform to the STANDARDS of Table 6 and Figure 6.

PROPOSED

Table 6. Stair Handrail Dimensions		
Dimensions	T-1	H-1
Minimum	3 inches	34 inches
Maximum	N/A	38 inches

Figure 6. Stair Handrails



(n) RECESSED STEPS shall be slip-resistant, easily cleanable, shall drain into the POOL, and dimensions shall conform to the STANDARDS of Table 7, Figure 7, and Figure 8.

Table 7. Recessed Steps Dimensions				
Dimensions	H-1	H-2	W-1	D-1
Minimum	6 inches	5 inches	12 inches	5 inches
Maximum	12 inches	N/A	N/A	N/A

Figure 7. Recessed Steps Dimensions

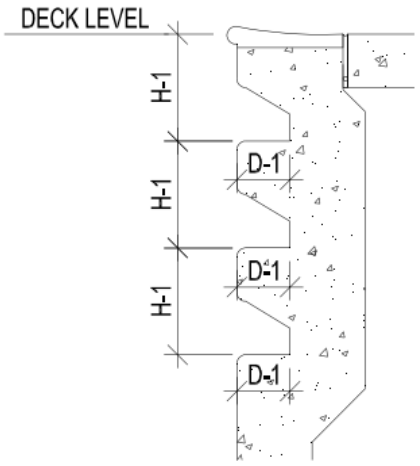
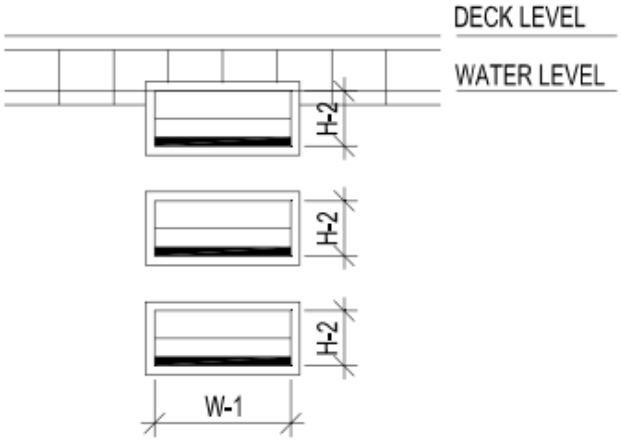


Figure 8. Recessed Steps Dimensions



§4617. Decks and Walkways.

(a) A continuous DECK with at least four feet of clearance from the POOL edge to fencing or other obstruction shall be provided to allow for QUALIFIED LIFEGUARD transit, roaming, or change of positioning to maximize viewing of the zone of BATHER surveillance as well as execution of water extrication. All DECK edges shall be beveled, rounded, or otherwise relieved to eliminate sharp corners. The DECK area shall be impervious and easily cleanable.

(b) The surface of the paved walk or DECK shall not drain into the PUBLIC SWIMMING POOL, RECIRCULATION SYSTEMS, or the overflow gutter. Drainage shall be conducted away from the POOL area in a manner that will not create muddy, hazardous, or objectionable conditions. DECKS shall be sloped away from the POOL and in accordance with Table 8.

Table 8. Minimum Slopes for Drainage	
Surface	Minimum Slope
Smooth finishes; such as tile, hand-finished concrete & lightly-broomed concrete	1/8 inch per foot
Moderately textured finishes; such as exposed aggregate or medium-broomed concrete	1/4 inch per foot
Heavily textured finishes; such as brick (where permitted)	3/8 inch per foot

§4618. Chemical Control.

(a) DISINFECTION and pH control chemicals shall be automatically introduced through the RECIRCULATION SYSTEM. A chemical controller, as specified in this Section shall be provided and used for monitoring and control of disinfectant and pH feed equipment. DISINFECTION and pH control chemicals shall be added using a feeder that meets the requirements outlined in this Section.

(b) The POOL shall be equipped with chemical feed equipment such as flow-through chemical feeders, electrolytic chemical generators, mechanical chemical feeders, chemical feed pumps, and automated controllers that are listed and labeled to NSF ANSI 50 by an ANSI-accredited certification organization. Flow-through chemical feeders shall only be used with the chemical (formulation, brand, size, and shape) specified by the chemical feeder manufacturer. All

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chemical feeders shall be provided with an automatic means to be disabled through an electrical interlock with at least two of the following:

(1) Recirculation pump power,

(2) Flow meter/flow switch in the return line,

(3) Chemical control power and paddle wheel or flow cell on the chemical controller if SAFETY test confirms feed systems are disabled through the controller when the pump is turned off, loses prime, or filters are backwashed.

(c) Feeders shall be capable of supplying disinfectant and pH control chemicals to the PUBLIC SWIMMING POOL to maintain the minimum required DISINFECTION levels at all times in accordance with these rules and regulations. All CHLORINE dosing and generating equipment, including erosion feeders, or in line electrolytic and brine/batch generators, shall be designed with a capacity to provide 4.0 lbs of FREE AVAILABLE CHLORINE (FAC)/day/10,000 gal of POOL water for outdoor PUBLIC SWIMMING POOLS, or 2.5 lbs FAC/day/10,000 gal of POOL water for INDOOR SWIMMING POOLS at a minimum.

(d) The injection point of DISINFECTION chemicals shall be located below any pH control chemical injection point with sufficient physical separation of the injection points to reduce the likelihood of mixing of these chemicals in the piping during periods of interruption of RECIRCULATION SYSTEM FLOW. Means of injection shall not allow BACKFLOW into the chemical system from the POOL system. Coagulants shall be metered and injected through a pump system prior to the filters per the manufacturer's recommended rate.

(e) Automated controllers shall be installed for monitoring and turning on or off chemical feeders used for pH and disinfectants at all PUBLIC SWIMMING POOLS. Operation manuals or other instructions that give clear directions for cleaning and calibrating automated

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controller probes and sensors shall be provided in close proximity to the automated controller. A set point shall be used to target the disinfectant level and the pH level.

(f) Equipment and piping used to apply chemicals to the water shall be of such size, design, and material that they may be cleaned and will be free from clogging. All material used for such equipment and piping shall be resistant to action of chemicals to be used therein.

§4619. Disinfection and Water Quality.

(a) PUBLIC SWIMMING POOLS when in use shall be continuously disinfected by a chemical which imparts a residual effect. Only products that are EPA-registered for use as sanitizers or disinfectants in PUBLIC SWIMMING POOLS shall be permitted.

(b) When CHLORINE is used, PUBLIC SWIMMING POOLS not using cyanuric acid (CYA), shall maintain a minimum FAC concentration of 1.0 ppm, and POOLS using CYA shall maintain a minimum FAC concentration of 2.0 ppm. SPAS shall maintain a minimum FAC concentration of 3.0 ppm. Maximum FAC concentrations shall not exceed 10.0 ppm at any time the PUBLIC SWIMMING POOL is open to BATHERS.

(c) If used, CYA levels shall not exceed 90 ppm. Use of CYA or stabilized CHLORINE products shall be prohibited for new construction, SUBSTANTIAL ALTERATION, or DISINFECTION equipment replacements in SPAS and THERAPY POOLS after the effective date of these rules and regulations.

(d) Bromine-based disinfectants may be applied to PUBLIC SWIMMING POOLS through the addition of an organic bromine compound (1,3-Dibromo-5,5-dimethylhydantoin (DBDMH) or 1-bromo-3-chloro-5,5-dimethylhydantoin (BCDMH)). Minimum bromine concentrations of 4.0 ppm shall be maintained at all times in SPAS, and 3.0 ppm shall be maintained at all times in all

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other PUBLIC SWIMMING POOLS. The maximum bromine concentration shall not exceed 8.0 ppm at any time the PUBLIC SWIMMING POOL is open to BATHERS.

(e) Use of compressed CHLORINE gas shall be prohibited for new construction and after SUBSTANTIAL ALTERATION to existing PUBLIC SWIMMING POOLS. For existing facilities using CHLORINE gas, the following additional features shall be provided:

(1) The CHLORINE and chlorinating equipment shall be in a separate room with a shatter-proof ventilation system capable of 60 air changes per hour. Such rooms shall not be below ground level and shall be provided with a shatter-proof gas-tight inspection window. The door of the room shall not open to the PUBLIC SWIMMING POOL, and shall open to the exterior of the building or structure.

(2) The chlorinator equipment shall be of rugged design capable of withstanding wear without developing leaks.

(3) CHLORINE cylinders shall be anchored to prevent their falling over. A valve-stem wrench shall be maintained on the CHLORINE cylinders in use so the supply can be shut off quickly in the case of an emergency.

(4) The CHLORINE feeding device shall be designed so that during accidents or interruptions of the water supply, leaking CHLORINE gas will be conducted to the out-of-doors.

(5) The chlorinator shall be a solution feed-type capable of delivering CHLORINE at its maximum rate without releasing CHLORINE gas to the atmosphere.

(6) The chlorinators shall be designed to prevent the BACKFLOW of water into the CHLORINE solution container.

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(7) Personal protective equipment, consisting of at least a gas mask designed for use in a CHLORINE atmosphere and of a type approved by the National Institute for Occupational Safety and Health (NIOSH) shall be stored directly outside one entrance of the room in which the chlorinator is maintained. In addition, a replacement canister shall be provided and a record shall be kept of gas mask usage to ensure that the mask will be serviceable when needed.

(8) A minimum of two self-contained breathing apparatus (SCBA) systems shall be on hand at all times and two QUALIFIED OPERATORS are to be involved in the changing of the tanks. One of the QUALIFIED OPERATORS should be stationed outside of the chemical room where the QUALIFIED OPERATOR inside can be seen at all times.

(9) An emergency direct line telephone shall be located by the door.

(f) Other sanitizers and disinfectants are acceptable when they are demonstrated to provide a readily measurable residual. Such sanitizers and disinfectants shall not create a hazardous condition or compromise disinfectant efficacy when used with required bromine and CHLORINE concentrations and not interfere with water quality measures meeting all criteria set forth in these rules and regulations.

(g) The PUBLIC SWIMMING POOL water shall be maintained in an alkaline condition as indicated by pH of not less than 7.2 and not over 7.8. A pH testing kit accurate to the nearest 0.2 pH unit shall be provided at each PUBLIC SWIMMING POOL.

(h) PUBLIC SWIMMING POOL water shall be chemically balanced. Total alkalinity shall be maintained in the range of 60-180 ppm. Calcium hardness shall not exceed 1,000 ppm. When the level of combined CHLORINE (chloramines) exceeds 0.4 ppm, actions shall be taken by the operator to reduce this level. Such actions shall include but are not limited to superchlorination,

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water exchange, or PATRON adherence to appropriate BATHER hygiene practices. EPA-registered algaecides may be used provided that the product is labeled as an algaecide for PUBLIC SWIMMING POOL use and the product is used in strict compliance with label instructions.

(i) A water quality testing kit for measuring the concentration of the disinfectant residual, pH, alkalinity, CYA (if used), and temperature, certified to NSF/ANSI 50 by an ANSI-accredited certification organization, shall be provided at each POOL. FAC, combined AVAILABLE CHLORINE (CAC), or total bromine (TB), and pH shall be tested at all PUBLIC SWIMMING POOLS prior to opening each day. For all PUBLIC SWIMMING POOLS using an automated disinfectant feed system, FAC (or TB) and pH shall be tested every four hours while open to the public. PUBLIC SWIMMING POOLS using a manual disinfectant feed system that delivers disinfectant via a flow through erosion feeder or metering pump without an automated controller, FAC or bromine and pH shall be tested every two hours while open to the public. Total alkalinity shall be tested weekly. Total dissolved solids shall be tested quarterly. Calcium hardness and SATURATION INDEX shall be tested monthly. If used, CYA shall be tested 24 hours after the addition of CYA and monthly thereafter. If PUBLIC SWIMMING POOLS use stabilized CHLORINE as its primary disinfectant, the operator shall test CYA every two weeks.

(j) The maximum temperature for PUBLIC SWIMMING POOLS shall be 104°F.

(k) The new construction or SUBSTANTIAL ALTERATION of PUBLIC SWIMMING POOLS designed primarily for children under 5 years old, such as WADING POOLS, and THERAPY POOLS shall be required to use a SECONDARY DISINFECTION SYSTEM within one year of the effective date of these rules and regulations:

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(1) SECONDARY DISINFECTION SYSTEMS shall be designed to achieve a minimum 3-log (99.9%) reduction in the number of infective *Cryptosporidium parvum* OOCYSTS per pass through the SECONDARY DISINFECTION SYSTEM.

(2) The SECONDARY DISINFECTION SYSTEM shall be located in the treatment loop (post filtration) and treat a portion (up to 100%) of the filtration flow prior to return of the water to the PUBLIC SWIMMING POOL.

(l) Removal of water from the POOL and replacement with make-up water shall be performed as needed to maintain water quality. A volume of water totaling at least four gallons per BATHER per day per PUBLIC SWIMMING POOL shall be discharged from the system or treated with an alternate system approved by the DEPARTMENT and reused.

§4620. Water Clarity.

The water in a PUBLIC SWIMMING POOL shall be sufficiently clear such that the bottom is visible while the water is static. To make this observation, a four-inch by four-inch marker tile in contrasting color to the POOL floor or main suction outlet shall be located at the deepest part of the POOL. For POOLS over 10 feet deep, an eight by eight-inch square marker tile, shall be used as a reference point. Such reference point shall be visible at all times at any point on the DECK up to 30 feet away in a direct line of sight from the tile or main drain.

§4621. Electrical Requirements.

Nothing in these rules and regulations shall be construed as providing relief from any applicable requirements of the National Electrical Code (NEC) or other applicable code.

(a) INDOOR SWIMMING POOLS and CHEMICAL STORAGE SPACES shall be considered wet and corrosive environments.

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(b) Electrical conduit, devices or equipment shall not enter, pass through, or occupy an interior CHEMICAL STORAGE SPACE, except as required to service devices integral to the function of the room, such as pumps, vessels, controls, or lighting and SAFETY devices, if allowed by the local electrical code.

(c) Lamps, including fluorescent tubes, installed in interior CHEMICAL STORAGE SPACES shall be protected against breakage with a lens or other cover, or be otherwise protected against the accidental release of hot materials.

§4622. Lighting Requirements.

Lighting as described in this Section shall be provided for all outdoor PUBLIC SWIMMING POOLS open for use from 30 minutes before sunset to 30 minutes after sunrise, or during periods of natural illumination below the levels required in this Section.

(a) EQUIPMENT ROOMS and INDOOR SWIMMING POOL water surface shall be lighted to provide a minimum of 30 horizontal foot candles of illumination. Outdoor water surface and DECK shall have a minimum maintained light level of ten horizontal foot candles of illumination.

(b) Where outdoor POOLS are open for use for night swimming, or during periods of low illumination, underwater lighting may be excluded where maintained POOL surface lighting levels are a minimum of 15 horizontal foot candles, and all portions of the POOL, including the bottom and drain(s), are readily visible as required in §4620.

(c) Where underwater lighting is used, not less than 0.5 watts shall be employed per square foot of PUBLIC SWIMMING POOL water surface area. Such lights shall be spaced to provide illumination so that all portions of the POOL, including the bottom and drain(s), may be seen readily without glare. Dimmable lighting shall not be used for underwater lighting.

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(d) When underwater POOL lighting fixtures are provided, they shall be installed so as not to create a SAFETY hazard to BATHERS. Branch circuits that supply underwater lights operating at more than the Low Voltage Contact Limit as defined in NEC 680.2 must be GROUND-FAULT CIRCUIT INTERRUPTER (GFCI) protected. The top of lens of the underwater lighting fixtures should be at least eighteen inches below water level of POOL. Lighting shall be such that lifeguards may see every part of the PUBLIC SWIMMING POOL, all diving boards, or other appurtenances, without being blinded by the light. Lights, appliances, and wiring shall be installed and grounded in accordance with the local electrical code. Overhead electrical wiring shall be designed and located so that wires cannot possibly fall on the PUBLIC SWIMMING POOL ENCLOSURES.

(e) No lighting controls shall be accessible to PATRONS or BATHERS.

(f) Outdoor POOLS, or POOLS with adequate natural light that are intended for daylight use only, shall prominently post signs which are legible at all entrances and which state that swimming after dark is not permitted in accordance with these rules and regulations.

§4623. Ventilation Requirements.

All INDOOR SWIMMING POOLS, SHOWER facilities, dressing rooms, toilet spaces, CHEMICAL STORAGE SPACES, and mechanical rooms shall be adequately ventilated either by natural or mechanical means and shall comply with ASHRAE Standard 62.1 2013, *Ventilation for Acceptable Indoor Air Quality*.

§4624. Theoretical Peak Occupancy.

(a) The THEORETICAL PEAK OCCUPANCY for a PUBLIC SWIMMING POOL shall be used for designing systems that serve BATHERS and PATRONS, and shall incorporate non-water related

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areas such as DECKS and other adjacent portions of the PUBLIC SWIMMING POOL not associated with the PUBLIC SWIMMING POOL.

(b) The THEORETICAL PEAK OCCUPANCY shall be calculated by dividing the surface area in square feet of the PUBLIC SWIMMING POOL by the density factor (D) that fits the specific PUBLIC SWIMMING POOL being considered.

THEORETICAL PEAK OCCUPANCY = PUBLIC SWIMMING POOL Surface Area / D

The density factors (D) are:

Water/BATHER-related:

(1) FLAT WATER density factor = 20 sq. ft. per BATHER

(2) AGITATED WATER density factor = 15 sq. ft. per BATHER

(3) HOT WATER density factor = 10 sq. ft. per BATHER

(4) WATERSLIDE LANDING POOL density factor = manufacturer-established capacity at any given time.

(5) Interactive water play water density factor = 10 sq. ft. per BATHER on surface.

(6) SURF POOL density factor = manufacturer-established capacity at any given time.

Non-water/PATRON-related:

(7) DECK density factor = 50 sq. ft. per BATHER.

(8) Stadium seating density factor = 6.6 sq. ft. per BATHER

(c) The density factors in (b) of this Section may be modified for higher BATHER or PATRON density, but they shall not be modified to result in less BATHERS per square foot than listed.

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(d) The THEORETICAL PEAK OCCUPANCY shall be determined by adding the calculations for each PUBLIC SWIMMING POOL in the facility

§4625. Hygiene Facilities Requirements.

(a) A PUBLIC SWIMMING POOL designed primarily for use by children less than five years of age shall have, at a minimum, a drinking fountain, toilet, SHOWER facilities, HANDWASHING STATION, and DIAPER-CHANGING STATION located no greater than 200 feet walking distance and in clear view from the nearest entry/exit of the PUBLIC SWIMMING POOL. All other PUBLIC SWIMMING POOLS, except those exempted under §4625 (l), shall have a drinking fountain, toilet, SHOWER facilities, and HANDWASHING STATION located no greater than 300 feet walking distance from each PUBLIC SWIMMING POOL.

(b) All PUBLIC SWIMMING POOLS allowing use by diaper-aged BATHERS (i.e., children less than five years of age) shall have at least one DIAPER-CHANGING STATION in each male and female HYGIENE FACILITY or make available a unisex DIAPER-CHANGING STATION. DIAPER CHANGING UNITS shall conform to the ASTM Standard F2285-04*: Consumer Performance Standards for Commercial Diaper-Changing Stations* or the STANDARDS for diaper-changing surfaces in the most current version of *Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care Programs*.

(c) If a hand wash sink is not available adjacent to the DIAPER-CHANGING STATION, a portable HANDWASHING STATION shall be available adjacent to the station at all times. In addition, a covered, hands-free, plastic-lined trash receptacle or diaper pail shall be located directly adjacent to the DIAPER-CHANGING UNIT.

(d) The minimum number of CLEANSING SHOWERS shall be one per gender for PUBLIC SWIMMING POOLS less than 4,000 square feet in collective surface area. An additional CLEANSING

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SHOWER per gender shall be added for each additional 4,000 square feet of POOL space or portion thereof. CLEANSING SHOWERS shall be evenly distributed between genders, as applicable. The layout of the SHOWER rooms shall be such that the BATHERS on leaving the dressing room pass the toilets and SHOWERS enroute to the PUBLIC SWIMMING POOL.

(e) SHOWERS shall be supplied with soap in a soap dispenser, and water at a rate of at least three gallons per minute per SHOWER head.

(f) Entryways to private or group CLEANSING SHOWER areas shall be enclosed by a door or curtain made of smooth, easy-to-clean material.

(g) A minimum of one RINSE SHOWER shall be provided on the DECK near an entry point to the PUBLIC SWIMMING POOL or arranged to encourage BATHERS to use the RINSE SHOWER prior to entering the POOL. A minimum of four showerheads per 50 feet of beach entry POOLS shall be provided as a RINSE SHOWER. A minimum of one RINSE SHOWER shall be provided at each entrance to a LAZY RIVER and WATERSLIDE queue line.

(h) PUBLIC SWIMMING POOLS with 7,500 square feet of water area or more may be flexible in the number of SHOWERS they provide based on the THEORETICAL PEAK OCCUPANCY in §4624 provided the following requirements are met:

(1) 25% of the required SHOWERS shall be CLEANSING SHOWERS;

(2) 25% of the required SHOWERS shall be RINSE SHOWERS; and

(3) the remaining 50% may be either CLEANSING or RINSE SHOWERS.

(i) All floors and other surfaces which may be walked on by BATHERS shall have a smooth, easy-to-clean, impervious-to-water, slip-resistant surface. Floors shall be sloped to drain water or other liquids.

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(j) Walls, partitions, doors, lockers, and similar surfaces which require periodic cleaning shall be of impervious material, smooth, and finished so as to facilitate thorough scrubbing. Interior walls and partitions shall terminate not less than six inches above the floor, or shall rest on masonry or concrete not less than four inches above the floor. Junctures inside the building between all walls or partitions and floors of structures shall be covered.

(k) Lockers shall be set either on solid masonry bases four inches high or on legs with bottom of locker at least ten inches above the floor. Lockers shall be properly vented.

(l) The requirement relating to dressing rooms and SHOWERS shall be waived, if requested by owner, for POOLS with use limited to the tenants of the specific motel, apartment complex, condominium, or hotel that is served, and whose PATRONS use these facilities in their own quarters before entering the POOL. If toilets in the private quarters or public sections of these establishments are available to all swimmers within a travel distance of three hundred feet from a POOL, and are located not more than two floors above or below the POOL DECK, toilet facilities will not have to be provided at the POOL DECK. Drinking fountains will not be required at POOLS for motels, apartment complexes, condominiums or hotels.

(m) Unless exempted by (l) of this Section, toilet and handwashing facilities shall be provided for the THEORETICAL PEAK OCCUPANCY as computed under §4624 on the basis of the fixture schedule on Table 9.

Table 9. Minimum Required Plumbing Fixtures		
Hygiene Facility	Males	Females
Toilets	1/75	1/40
Urinals	1/75	----
Handwashing Sinks	1/100	1/100
Fixture schedules may be increased in public swimming pools at school, camps, or similar locations where bather loads may reach peaks due to schedules of use.		

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(n) HYGIENE FACILITY floors, walls, and ceilings shall be kept clean and free of visible mold and mildew at all times.

(o) HYGIENE FACILITY fixtures, dressing area fixtures, and furniture shall be cleaned and SANITIZED daily, and more often if necessary, with an EPA-registered product.

(p) HYGIENE FACILITY fixtures shall be maintained in good repair. Toilet tissue shall be provided in toilet rooms and soap and paper towels shall be provided at each handwashing sink. A minimum of one hands-free trash receptacle shall be provided in areas adjacent to handwashing sinks.

(q) FOOT BATHS shall be prohibited.

§4626. Bathing Suits, Caps, and Towels.

Reusable bathing suits, caps, and towels furnished to PUBLIC SWIMMING POOL users by the management shall be laundered and/or cleaned, and SANITIZED after each usage. Adequate STORAGE shall be provided for storing clean suits, towels, and other shared equipment, and shall be separate from used or unclean materials.

§4627. Barriers and Enclosures.

(a) All PUBLIC SWIMMING POOLS, CHEMICAL STORAGE SPACES, and mechanical spaces shall be enclosed to prevent unauthorized entry. The ENCLOSURE may consist of any combination of building envelopes, site walls, or fencing and shall not be less than six feet in height measured from the finished grade to the top of the BARRIER on the side outside of the BARRIER surrounding the PUBLIC SWIMMING POOL. Chain-link fencing constructed of a maximum opening of 1 ¾ inches mesh shall be permitted.

(b) All primary public access gates or doors serving as part of a PUBLIC SWIMMING POOL ENCLOSURE or required PUBLIC SWIMMING POOL ENCLOSURE shall be self-closing and self-

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latching from any open position. All gates or doors shall be capable of being locked from the exterior and shall be at least equal in height at top and bottom to the BARRIER of which they are a component. Turnstiles shall not form a part of a PUBLIC SWIMMING POOL ENCLOSURE. For unguarded PUBLIC SWIMMING POOLS, self-latching mechanisms must be located not less than four and a half feet above finished grade.

§4628. Visitor and Spectator Areas.

(a) When a spectator area or an access to a spectator area is located within the PUBLIC SWIMMING POOL ENCLOSURE, the DECK adjacent to the area or access shall provide egress width for the spectators in addition to the width required by §4617. The additional width shall be based on the egress requirements in the applicable building code based on the THEORETICAL PEAK OCCUPANCY of the PUBLIC SWIMMING POOL served with a minimum width of four feet.

(b) A BARRIER located on the DECK to separate the DECK used by spectators from the PERIMETER DECK used by BATHERS may have one or more openings directly into the BATHER areas with a demarcation line on the DECK that shows the separation between the DECK used by spectators and the PERIMETER DECK used by BATHERS.

(c) A spectator or other area located in a balcony within ten feet of or overhanging any portion of a PUBLIC SWIMMING POOL shall be designed to deter jumping or diving into the PUBLIC SWIMMING POOL.

(d) No food or drink shall be permitted in the immediate area of the PUBLIC SWIMMING POOL or on the DECKS surrounding the POOL except that food and beverage will be allowed in the visitor and spectator area, or in a similarly separated snack area for BATHERS, if beverages are served in non-breakable containers and trash containers are provided to keep litter off of the POOL DECKS.

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§4629. Cleaning and Maintenance.

(a) The PUBLIC SWIMMING POOL wall, floor, walkway, and DECK floor shall be kept clean and free from accumulation of algae, mold, mildew, and/or slime.

(b) Floating scum, sputum, and debris in the PUBLIC SWIMMING POOL shall be removed within twenty-four hours or more frequently as required. Visible dirt on the bottom of a PUBLIC SWIMMING POOL shall be removed at least once each day.

(c) All parts of the POOL shall be maintained in good repair. Floors shall be kept free from cracks and other defects, and shall conform with §4607. Walls, ceilings, and equipment shall be painted as often as necessary to be kept in good condition.

(d) The whole POOL area shall be kept clean and sanitary, free of litter, and pests. Hoses shall be maintained for regular flushing and cleaning. During extended periods of non-use when the recirculation and purification is not functioning, POOLS shall be maintained so as to prevent their becoming a mosquito breeding source. This shall be accomplished by securely covering, draining the POOL of all water, and keeping the POOL free of standing water; or by some other means as approved by the DEPARTMENT.

§4630. Wading Pool.

In addition to the general PUBLIC SWIMMING POOL requirements stated in these rules and regulations, WADING POOLS shall be separated from other POOLS by a BARRIER that meets the requirements of §4627, unless the WADING POOL is separated by a distance of 15 feet from other bodies of water. WADING POOLS near other WADING POOLS shall not be required to be separated by a BARRIER.

§4631. Spas.

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In addition to the general PUBLIC SWIMMING POOL requirements stated in these rules and regulations, SPAS shall comply with the following provisions:

(a) The maximum water depth in SPAS shall be four feet measured from the designed static water line except for SPAS that are designed for special use and purposes and approved by the DEPARTMENT.

(b) The maximum submerged depth of any seat or sitting bench shall be 28 inches measured from the water line.

(c) A SPA shall have one or more suitable, slip-resistant handhold(s) around the perimeter and not over 12 inches above the water line.

(d) Interior steps or stairs shall be provided where SPA depths are greater than 24 inches. Each set of steps shall be provided with at least one handrail to serve all treads and risers.

(e) Elevated SPAS may be located adjacent to another PUBLIC SWIMMING POOL as long as there is an effective BARRIER between the SPA and the adjacent PUBLIC SWIMMING POOL, or a minimum distance of four feet between the PUBLIC SWIMMING POOL and SPA is provided.

(f) A minimum of two depth markers shall be provided regardless of the shape or size of the SPA.

(g) Water temperatures shall not exceed 104°F.

(h) The agitation system shall be connected to a minute timer that does not exceed 15 minutes that shall be located out of reach of a BATHER in the SPA.

(i) All SPAS shall have a clearly labeled emergency shutoff or control switch for the purpose of stopping the motor(s) that provide power to the RECIRCULATION SYSTEM and hydrotherapy or agitation system that shall be installed and be readily accessible to the BATHERS, in accordance with the NEC.

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(j) SPAS shall have a minimum of two adjustable filter system INLETS spaced at least three feet apart and designed to distribute flow evenly.

§4632. Water Slides.

(a) The design engineer shall address compliance with the following STANDARDS and must provide documentation and/or certification that the WATERSLIDE design is in conformance with these STANDARDS:

(1) ASTM F2376-13: *Standard Practice for Classification, Design, Manufacture, Construction, and Operation of Water Slide Systems; and*

(2) ASTM F2469-09: *Standard Practice for Manufacturer, Construction, Operation, and Maintenance of Aquatic Play Equipment*.

(b) Signs indicating riding instructions, warnings, and requirements in accordance with the manufacturer recommendations shall be posted at the WATERSLIDE entry.

(c) FLUME surfaces shall be inert, nontoxic, smooth, and easily cleaned. All FLUME valleys and dips shall have proper drainage, SAFETY measures that insure a rider cannot fall from the FLUME, and a means of egress in the event the ride malfunctions or a rider stops on the ride. The exit of any FLUME must be designed to ensure that BATHERS enter the LANDING POOL or SLIDE RUNOUT at a safe speed and angle of entry. If a WATERSLIDE has two or more FLUMES and there is a point of intersection between the centerlines of any two FLUMES, the distance between that point and the point of exit for each intersecting FLUME must not be less than the SLIDE manufacturer's recommendations and ASTM F2376.

(d) WATERSLIDES shall be designed to terminate at or below water level, except for DROP SLIDES or unless otherwise permitted by the WATERSLIDE manufacturer and ASTM F2376. WATERSLIDES shall be perpendicular to the wall of the PUBLIC SWIMMING POOL at the point of

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exit unless otherwise permitted by the WATERSLIDE manufacturer. WATERSLIDES shall be designed with an exit system which shall be in accordance with the WATERSLIDE manufacturer's recommendations and ASTM F2376, and provides for safe entry into the LANDING POOL or WATERSLIDE RUNOUT.

(e) If steps are provided instead of exit ladders or RECESSED STEPS with grab rails, they shall be installed at the opposite end of the LANDING POOL from the FLUME exit and a handrail shall be provided.

(f) If the WATERSLIDE FLUME ends in a PUBLIC SWIMMING POOL, the landing area shall be divided from the rest of the PUBLIC SWIMMING POOL by a float line, wing wall, peninsula, or other similar feature to prevent collisions with other BATHERS.

(g) A PERIMETER DECK shall be provided along the exit side of the LANDING POOL. In addition, a walkway, steps, stairway or ramp shall be provided between the LANDING POOL and the top of the FLUME.

(h) There shall be a SLIDE landing area in accordance with the SLIDE manufacturer's recommendations and ASTM F2376. This area shall not infringe on the landing area for any other SLIDES, diving equipment, or any other minimum PUBLIC SWIMMING POOL clearance requirements. The minimum required water depth shall be in accordance with the SLIDE manufacturer's recommendations and ASTM F2376.

(i) The landing area of the SLIDE shall be protected through the use of a float line, wing wall, peninsula. or other similar impediment to prevent collisions with other BATHERS.

§4633. Lazy Rivers.

In addition to the general PUBLIC SWIMMING POOL requirements stated in these rules and regulations, LAZY RIVERS shall comply with the following additional provisions:

PROPOSED

(a) Handrails, steps, stairs, and propulsion jets for LAZY RIVERS shall not protrude into the river.

(b) Means of access/egress shall be provided at 150-foot intervals around the LAZY RIVER.

(c) A DECK shall be provided along the entire length of the LAZY RIVER.

(d) Obstructions around the perimeter of the LAZY RIVER, such as bridges or landscaping, shall be allowed provided they do not impact lifeguarding, sight lines, or rescue operations. All bridges spanning a LAZY RIVER shall have a minimum clearance of both seven feet from the bottom of the LAZY RIVER and four feet above the water surface to any structure overhead.

§4634. Qualified Operator.

(a) Every PUBLIC SWIMMING POOL shall be under the supervision of a QUALIFIED OPERATOR who shall assume the responsibility for compliance with all parts of these rules and regulations relating to POOL operation and maintenance and SAFETY of BATHERS. A QUALIFIED OPERATOR shall have completed an operator training course that is recognized by the DEPARTMENT. Originals or copies of such course certificate or documentation shall be available on site for inspection by the health officer for each QUALIFIED OPERATOR employed at or contracted by the site.

(b) A QUALIFIED OPERATOR shall be on-site or immediately available within two hours during all hours of operation at a PUBLIC SWIMMING POOL that:

(1) Has more than two PUBLIC SWIMMING POOLS;

(2) Has over 50,000 gallons of water;

(3) Include features with recirculated water;

PROPOSED

(4) Is used as a THERAPY POOL or to provide swimming training;

(5) Allows BATHER count of greater than 200 BATHERS daily;

(6) Is operated by a municipality or a school; or

(7) Has a history of repeated violations of these rules and regulations which in the opinion of the health officer requires one or more on-site QUALIFIED OPERATORS.

(c) All other PUBLIC SWIMMING POOLS shall have an on-site QUALIFIED OPERATOR immediately available within two hours or a contract with a QUALIFIED OPERATOR for a minimum of weekly visits and assistance whenever needed.

(d) A QUALIFIED OPERATOR shall keep operation, SAFETY, emergency, and training plans on file at the facility. In addition, records pertaining to the operation, maintenance and management of the PUBLIC SWIMMING POOL, such as chemical inventory log, water monitoring and testing records, and other records required in these rules and regulations shall be maintained. Such records shall be kept for a minimum of three years and shall be available upon request by the health officer.

(e) The QUALIFIED OPERATOR shall ensure that a daily preventive maintenance inspection for PUBLIC SWIMMING POOLS listed in (b) of this Section is done before opening and that it shall include the following:

(1) Walkways/DECK and exits are clear, clean, free of debris;

(2) Drain covers, vacuum fitting covers, SKIMMER equalizer covers, and any other suction outlet covers are in place, secure, and unbroken;

(3) SKIMMER baskets, weirs, lids, flow adjusters, and suction outlets are free of any blockage;

PROPOSED

(4) INLET and return covers and any other fittings are in place, secure, and unbroken;

(5) SAFETY warning signs and other signage are in place and in good repair;

(6) SAFETY equipment as required by these rules and regulations are in place and in good repair, including emergency instructions and phone numbers;

(7) Entrapment prevention systems are operational;

(8) Recirculation, DISINFECTION systems, controller(s), and probes are operating as required;

(9) SECONDARY DISINFECTION SYSTEMS are operating as required;

(10) Underwater lights and other lighting are intact with no exposed wires or water in lights;

(11) Slime and biofilm have been removed from accessible surfaces of PUBLIC SWIMMING POOL SLIDES, and other features;

(12) Doors to non-public areas (CHEMICAL STORAGE SPACES, offices, etc.) are locked;

(13) First aid supplies are stocked;

(14) Emergency communication equipment and systems are operational;

(15) Fecal/vomit/blood incident contamination response protocols, materials, and equipment are available;

(16) Water features and amenities are functioning in accordance with the manufacturer's recommendations;

PROPOSED

(17) Fencing/BARRIERS, gates, and self-latching or other locks are tested and are intact and functioning properly, and BARRIERS do not have nearby furniture to encourage climbing;

(18) Drinking fountains are clean and in functional condition;

(19) Electrical devices are in good working condition and meet the requirements specified in the NEC and these rules and regulations;

(20) Alarms, if required, are tested and functioning properly; and

(21) Assessing water clarity such that the bottom and objects in the POOL are clearly visible.

§4635. Safety Requirements.

(a) PUBLIC SWIMMING POOLS operated primarily for unorganized use and having an area of more than two thousand two hundred fifty square feet of water surface area, shall be provided with an elevated lifeguard platform or chair. In POOLS with four thousand square feet or more of water surface area, additional elevated chairs or stations located so as to provide a clear unobstructed view of the POOL bottom in the area under surveillance shall be provided. (Ideally, chairs should be placed in locations which eliminate sun glare on the water, and in positions which will give complete coverage of the POOL within a field view limited to 45^0 on either side of a line of sight extending straight out from the chair.)

(b) Enough acoustical treatment, including material and ceiling design, shall be given to enclosed POOL rooms to control noise levels. It is essential for SAFETY that swimmers be able to hear signals and directions of routine supervision as well as emergency control.

(c) When the POOL is not open for use, access to the POOL shall be prevented.

PROPOSED

(d) At all POOLS, diagrammatic illustrations of artificial respiration procedures shall be posted where clearly visible from the nearby DECK and shall be protected against the elements. Also, the location and telephone number of the nearest ambulance, hospital, fire, or police rescue service, physician, and POOL operator shall be kept similarly posted together with instructions that in case of need, manual or mouth-to-mouth artificial respiration should be started immediately and continued until a physician arrives or mechanical resuscitators are applied.

(e) Whenever the POOL is opened for use and no lifeguard service is provided, the warning sign shall be placed in plain view and shall state "Warning -- No Lifeguard on Duty" with clearly visible letters at least four inches high. In addition, the sign shall also state "Children under the age of 14 should not use POOL without direct adult supervision."

(f) The PUBLIC SWIMMING POOL, as necessary, shall have a functional telephone or other communication system or device that is hard wired and capable of directly dialing 911 or function as the emergency notification system. The telephone or communication system or device shall be conspicuously provided and accessible to PUBLIC SWIMMING POOL users such that it can be reached immediately. Alternate functional systems, devices, or communication processes are allowed with the DEPARTMENT's approval in situations when a hardwired telephone is not logistically sound, and an alternate means of communication is available. A permanent sign providing emergency dialing directions and the PUBLIC SWIMMING POOL address shall be posted and maintained at the emergency telephone, system or device.

§4636. Lifesaving Equipment, First-Aid Kit.

(a) PUBLIC SWIMMING POOLS whose depth exceeds two feet of standing water shall provide and maintain a U.S. Coast Guard-approved PUBLIC SWIMMING POOL rescue throwing device, with at least a quarter-inch thick rope whose length is 50 feet or 1 and ½ times the width

PROPOSED

of the POOL, whichever is less. The rescue throwing device shall be located in the immediate vicinity to the PUBLIC SWIMMING POOL and be accessible to BATHERS.

(b) PUBLIC SWIMMING POOLS whose depth exceeds two feet of standing water shall provide and maintain a reaching pole of 12-foot to 16-foot in length, non-telescopic, light in weight, and with a securely attached Shepherd's Crook with an aperture of at least 18 inches. The reaching pole shall be located in the immediate vicinity to the PUBLIC SWIMMING POOL and be accessible to BATHERS and PATRONS.

(c) When any POOL is of such size that unaided swimming rescues by lifeguards may not offer sufficient protection to swimmers, one or more square-sterned boats equipped with oars, oarlocks, life rings, or paddle boards shall be provided.

(d) Every PUBLIC SWIMMING POOL shall be equipped with a STANDARD first-aid kit which shall be kept filled and ready for use. Signage shall be provided at the PUBLIC SWIMMING POOL which clearly identifies first aid location(s). Availability of a kit in the office of the resident manager for a motel, apartment complex, condominium, or hotel shall satisfy this requirement for such POOLS.

(e) Lifesaving equipment shall be mounted in conspicuous areas around the PUBLIC SWIMMING POOL DECK, at lifeguard chairs, or elsewhere, readily accessible, its function plainly marked, and kept in repair and ready condition. BATHERS or other PERSONS shall not be permitted to tamper with or remove such equipment from its established location for any purpose other than the intended emergency use.

§4637. Qualified Lifeguards.

(a) One or more QUALIFIED LIFEGUARDS shall be on duty at POOL side at all times when the PUBLIC SWIMMING POOL is open to use by BATHERS except at POOLS with less than

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2,250 square feet of water surface. Such attendant should be in full charge of bathing and have authority to enforce all rules of SAFETY and sanitation.

(b) A QUALIFIED LIFEGUARD shall:

(1) Be a capable swimmer and be competent in lifesaving methods;

(2) Be trained in administration of artificial respiration and other first-aid measures;

(3) Have satisfactorily completed a lifeguard training course recognized by the DEPARTMENT. The valid and current certificate of completion of the course of instruction shall be available for verification;

(4) Be dressed suitably to enter the water and to take action on an emergency; and

(5) Not engaged in activities which would distract his attention from proper supervision of BATHERS using the PUBLIC SWIMMING POOL or prevent immediate attention to a BATHER in distress in the water.

(c) Each QUALIFIED LIFEGUARD conducting PATRON surveillance with the responsibility of in-water rescue in less than three feet of water shall have a rescue tube immediately available for use. Each QUALIFIED LIFEGUARD conducting PATRON surveillance in a water depth of three feet or greater shall have a rescue tube on his/her PERSON in a rescue ready position.

(d) PUBLIC SWIMMING POOLS with standing water and with any of the following conditions shall be required to have a lifeguard(s) conducting PATRON surveillance at all times the PUBLIC SWIMMING POOL is open.

(1) Any PUBLIC SWIMMING POOL deeper than five feet at any point;

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(2) Any PUBLIC SWIMMING POOL that allows for unsupervised children under the age of 14 years;

(3) Any PUBLIC SWIMMING POOL while it is being used for the recreation of youth groups, including but not limited to childcare usage or school groups;

(4) Any PUBLIC SWIMMING POOL while it is being used for group training must have a dedicated lifeguard on DECK for class surveillance, including but not limited to competitive swimming and/or sports, lifeguard training, exercise programs, and swimming lessons;

(5) Any PUBLIC SWIMMING POOL with a configuration in which any point on the PUBLIC SWIMMING POOL surface exceeds 30 feet from the nearest DECK;

(6) Any PUBLIC SWIMMING POOL with an induced current or wave action including but not limited to WAVE POOLS and LAZY RIVERS;

(7) WATERSLIDE LANDING POOLS; and

(8) Any PUBLIC SWIMMING POOL in which BATHERS enter the water from any height above the DECK including but not limited to diving boards, DROP SLIDES, starting platforms, and/or climbing walls. This does not include POOL SLIDES.

(e) When QUALIFIED LIFEGUARDS are used, the facility shall create and implement a staffing plan which includes diagrammed zones of PATRON surveillance for each PUBLIC SWIMMING POOL such that:

(1) The QUALIFIED LIFEGUARD is capable of viewing the entire area of the assigned zone of PATRON surveillance;

(2) The QUALIFIED LIFEGUARD is able to reach the furthest extent of the assigned zone of PATRON surveillance within 20 seconds;

PROPOSED

(3) Identify whether the QUALIFIED LIFEGUARD is in an elevated stand, walking, in-water and/or other approved position;

(4) Identifying any additional responsibilities for each zone; and

(5) All areas of each PUBLIC SWIMMING POOL are assigned a zone of PATRON surveillance and all zones of PATRON surveillance are staffed during operation.

(f) Employees who are ill with diarrhea shall not be permitted to enter the water or perform in a QUALIFIED LIFEGUARD role. Employees with open wounds shall be permitted in the water or in a QUALIFIED LIFEGUARD role only if they have healthcare provider approval or wear a waterproof, occlusive bandage to cover the wound.

§4638. Supervision of Bathers.

(a) POOL staff should encourage the following personal conduct regulations:

(1) All BATHERS shall be instructed to use the toilet, and particularly to urinate, before taking a cleansing bath and entering the POOL;

(2) All PERSONS using the PUBLIC SWIMMING POOL shall take a CLEANSING SHOWER bath in the nude, using warm water and soap and thoroughly rinsing off all suds, before entering the PUBLIC SWIMMING POOL room or ENCLOSURE. A BATHER leaving the POOL to use the toilet shall take another cleansing bath before returning to the PUBLIC SWIMMING POOL room or ENCLOSURE;

(3) Any PERSON having an infectious or communicable disease shall be excluded from a PUBLIC SWIMMING POOL. PERSONS having any considerable area of exposed sub-epidermal tissue, open blisters, cuts, etc., shall be warned that these are likely to become infected and advised not to use the POOL;

PROPOSED

(4) Spitting, spouting of water, blowing the nose, etc., in the PUBLIC SWIMMING POOL shall be strictly prohibited; and

(5) No running, boisterous or rough play, except supervised water sports, shall be permitted in the POOL, on the runways, DECK, diving boards, floats, platforms, or in dressing rooms, SHOWER rooms, etc.

(b) Signage shall be placed in a conspicuous place at the entrance of the PUBLIC SWIMMING POOL communicating expected and prohibited behaviors listed under (a) of this Section using text that complies with the intent of the said information.

§4639. Injury and Illness Incident Reporting.

A full report of any injury or illness incident occurring at a PUBLIC SWIMMING POOL shall be reported by the POOL owner/operator to the DEPARTMENT within 24 hours of its occurrence, and a notation recorded in a log book. This shall include all incidents occurring at a PUBLIC SWIMMING POOL which:

(a) result in death;

(b) require resuscitation;

(c) require referral to a hospital or other facility for medical attention; or

(d) is a BATHER illness associated with bathing water quality.

§4640. Water Contamination Response.

(a) In the event of a fecal or vomit contamination in a PUBLIC SWIMMING POOL, the QUALIFIED OPERATOR shall immediately close the PUBLIC SWIMMING POOL to BATHERS until remediation procedures are complete. This closure shall include the affected PUBLIC SWIMMING POOL and other PUBLIC SWIMMING POOLS that share the same RECIRCULATION SYSTEM.

PROPOSED

(b) Contaminating material shall be removed (e.g., using a net, scoop, or bucket) and disposed of in a sanitary manner. Fecal or vomit contamination of the item used to remove the contamination (e.g., the net or bucket) shall be removed by thorough cleaning followed by DISINFECTION (e.g., after cleaning, leave the net, scoop, or bucket immersed in the POOL during the DISINFECTION procedure prescribed for formed-stool, diarrheal-stool, or vomit contamination, as appropriate). PUBLIC SWIMMING POOL vacuum cleaners shall not be used for removal of contamination from the water or adjacent surfaces unless vacuum waste is discharged to a sanitary sewer and the vacuum equipment can be adequately disinfected.

(c) PUBLIC SWIMMING POOL water that has been contaminated by feces or vomit shall be treated as follows:

1) Check to ensure that the water's pH is 7.5 or lower and adjust if necessary;

2) Verify and maintain water temperature at 77°F or higher;

3) Operate the filtration/RECIRCULATION SYSTEM while the POOL reaches and maintains the proper free CHLORINE concentration during the remediation process;

4) Test the CHLORINE residual at multiple sampling points to ensure the proper free CHLORINE concentration is achieved throughout the POOL for the entire DISINFECTION time; and

5) Use only non-stabilized CHLORINE products to raise the free CHLORINE levels during the remediation.

(d) Formed-stool contaminated water shall have the FREE CHLORINE RESIDUAL checked and the FREE CHLORINE RESIDUAL raised to 2.0 mg/L (if less than 2.0 mg/L) and maintained for at least 25 minutes (or an equivalent time and concentration to reach the CT VALUE) before reopening the PUBLIC SWIMMING POOL.

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(e) Diarrheal-stool contaminated water shall:

1) Check the FREE CHLORINE RESIDUAL and then raise the FREE CHLORINE RESIDUAL to 20.0 mg/L and maintain for at least 12.75 hours (or an equivalent time and concentration to reach the CT VALUE) before reopening the PUBLIC SWIMMING POOL, or

2) Circulate the water through a SECONDARY DISINFECTION SYSTEM to theoretically reduce the number of *Cryptosporidium* OOCYSTS in the PUBLIC SWIMMING POOL below one OOCYST/100 mL.

(f) In PUBLIC SWIMMING POOL water that contains CYA or a stabilized CHLORINE product, water shall be treated by:

(1) Hyperchlorination accomplished by:

(i) Following the preparatory guidance outlined in (c) of this Section;

(ii) Lowering the CYA concentration to less than or equal to 15 ppm by draining, if necessary;

(iii) Raising the FREE CHLORINE RESIDUAL to 20 mg/L for at least 28 hours; 30 mg/L for at least 18 hours; 40 mg/L for at least 8.5 hours; or an equivalent time and concentration needed to reach the CT INACTIVATION VALUE;

(iv) Measurement of the inactivation time required shall start when the PUBLIC SWIMMING POOL reaches the intended FREE CHLORINE RESIDUAL level or;

(2) Circulating the water through a SECONDARY DISINFECTION SYSTEM to theoretically reduce the number of *Cryptosporidium* OOCYSTS in the PUBLIC SWIMMING POOL below one OOCYST/100 mL; or

(3) Draining the PUBLIC SWIMMING POOL completely.

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(g) Vomit-contaminated water shall have the FREE CHLORINE RESIDUAL checked and the FREE CHLORINE RESIDUAL raised to 2.0 mg/L (if less than 2.0 mg/L) and maintained for at least 25 minutes (or an equivalent time and concentration to reach the CT VALUE) before reopening the PUBLIC SWIMMING POOL.

(h) In PUBLIC SWIMMING POOL water that contains CYA or a stabilized CHLORINE product, water shall be treated by doubling the inactivation time required in these rules and regulations. Measurement of the inactivation time required shall start when the PUBLIC SWIMMING POOL reaches the intended free CHLORINE level.

(i) If a bodily fluid, such as feces, vomit, or blood, has contaminated a surface in a PUBLIC SWIMMING POOL, facility staff shall limit access to the affected area until remediation procedures have been completed. All visible CONTAMINANT shall be removed and the contaminated surface cleaned and disinfected.

§4641. Inspection and Grading.

(a) Access.

An employee or representative of the DEPARTMENT shall, after proper presentation of credentials, have access to any PUBLIC SWIMMING POOL at any reasonable time for the purpose of making inspections to determine compliance with these rules and regulations. Denial of access shall be cause for suspension of the Sanitary Permit.

(b) Report of Inspections.

Whenever an inspection of a PUBLIC SWIMMING POOL is conducted, the findings shall be recorded on a form authorized by the DIRECTOR, shall summarize the requirements of these rules and regulations, and shall set forth a demerit value for each requirement. Demerit value assignments shall be from one through six. Inspection remarks shall be written to reference, by

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section number, the section violated, and shall state the correction to be made. The rating score of the establishment shall be the total of the demerit values for all violations. A copy of the completed inspection report form shall be issued to the operator of the establishment at the conclusion of the inspection. The completed form is a public document that shall be made available for public disclosure to any person who requests it according to law.

(c) Appeal.

The report of inspection of a PUBLIC SWIMMING POOL shall state that an opportunity for appeal from any notice or inspection findings will be provided if a written request for a hearing is filed with the DIRECTOR within the period of time established in the notice for correction.

(d) Grading.

(1) Grades of a PUBLIC SWIMMING POOL shall be as follows:

(i) Grade A: An establishment having a demerit score of not more than ten;

(ii) Grade B: An establishment having a demerit score of more than ten but not more than twenty;

(iii) Grade C: An establishment having a demerit score of more than twenty but not more than forty; and

(iv) Grade D: An establishment having a demerit score of more than forty.

(2) The DEPARTMENT shall issue a placard reflecting the letter grade of the most recent inspection.

(3) The DEPARTMENT shall establish a specific and reasonable period of time for correction of the violations found, in accordance with the following provision:

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(i) When the demerit score of the establishment is twenty or less, all violations of one through five demerits must be corrected within a period of time not to exceed 30 days; or

(ii) When the demerit score of the establishment is more than twenty but less than forty-one, all items of one through five demerit points must be corrected within a period of time not to exceed 15 days; or

(iii) When one or more six demerit point items are in violation, regardless of demerit score, such items must be corrected within a period of time not to exceed 10 days; and

(iv) When the demerit score of the establishment is more than forty, the Sanitary Permit shall be immediately suspended.

(4) The operator shall at the time of inspection correct a violation of a CRITICAL ITEM of these rules and regulations. Considering the nature of the potential hazard involved and the complexity of the corrective action needed, the DIRECTOR may agree to or specify a longer time frame, not to exceed 10 calendar days after the inspection, for the operator to correct violations of a CRITICAL ITEM.

(5) The operator shall correct noncritical violations by a date and time agreed to or specified by the DIRECTOR but no later than 30 calendar days after the inspection. The DIRECTOR may approve a compliance schedule that extends beyond this time limit if a written schedule of compliance is submitted by the operator and no health hazard exists or will result from allowing an extended schedule of compliance.

PROPOSED

(e) Notwithstanding the grade criteria established above, whenever a second consecutive violation of the same item of 2, 4, or 6 demerit points is discovered, the permit may be suspended or in lieu thereof, the establishment shall be downgraded to the next lower grade.

(f) The operator shall ensure that he/she, or a designee, be present during inspections of a PUBLIC SWIMMING POOL by the DEPARTMENT.

(g) The Inspection Report and Letter Grade Placard shall be posted in a conspicuous area designated by the DIRECTOR or his/her representative.

§4642. Closure of Public Swimming Pool.

(a) Except as specified in (b) of this Section, an operator shall immediately discontinue operations and notify the DEPARTMENT if an IMMINENT HEALTH HAZARD may exist because of an emergency such as a fire, flood, extended interruption of electrical or water service, sewage backup, misuse of poisonous or toxic materials, gross insanitary occurrence or condition, or other circumstance that may endanger public health, such those listed in (d) of this Section.

(b) An operator need not discontinue operations in an area of a PUBLIC SWIMMING POOL that is unaffected by the IMMINENT HEALTH HAZARD.

(c) Failure to report an IMMINENT HEALTH HAZARD to the DEPARTMENT may result in immediate suspension of the Sanitary Permit.

(d) The DIRECTOR shall order immediate correction of the following violations, or immediate closure of the PUBLIC SWIMMING POOL whenever he finds any of the following conditions:

(1) Failure to continuously operate the PUBLIC SWIMMING POOL filtration or DISINFECTION equipment;

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(2) Failure to provide adequate supervision and staffing as described in these rules and regulations;

(3) Failure to provide the minimum disinfectant residual levels;

(4) pH below 6.5 or above 8.0;

(5) Use of an unapproved or contaminated water supply source for potable water use;

(6) Unprotected overhead electrical wires within 20 feet horizontally of the PUBLIC SWIMMING POOL;

(7) Non-GFCI protected electrical receptacles within 20 feet of the inside wall of the PUBLIC SWIMMING POOL;

(8) Failure to maintain an emergency lighting source;

(9) Absence of all required lifesaving equipment on DECK;

(10) PUBLIC SWIMMING POOL bottom not visible;

(11) Total absence of or improper depth markings at a PUBLIC SWIMMING POOL;

(12) Plumbing CROSS-CONNECTIONS between the drinking water supply and PUBLIC SWIMMING POOL water or between sewage system and the PUBLIC SWIMMING POOL including filter backwash facilities;

(13) Failure to provide and maintain an ENCLOSURE or BARRIER to inhibit unauthorized access to the PUBLIC SWIMMING POOL when required;

(14) Use of unapproved chemicals or the application of chemicals by unapproved methods to the PUBLIC SWIMMING POOL water;

(15) Broken, unsecured, or missing main drain grate or any submerged suction outlet grate in the PUBLIC SWIMMING POOL;

PROPOSED

(16) Number of BATHERS/PATRONS exceeds the THEORETICAL PEAK OCCUPANCY;

(17) Broken glass or sharp objects in PUBLIC SWIMMING POOL or on DECK area;

(18) Failure to possess a valid Sanitary Permit; or

(19) It is declared a "public nuisance" as defined in 10 GCA §20107.

(e) When the DIRECTOR orders closure of a PUBLIC SWIMMING POOL, he shall issue a written order to the PUBLIC SWIMMING POOL owner, operator, or his representative stating that the PUBLIC SWIMMING POOL is to be closed immediately and specifying corrective action(s) to be taken. The PERSON to whom the order is issued shall close the PUBLIC SWIMMING POOL immediately and shall prohibit any PERSON from using it. The DIRECTOR or his/her representative shall post a notice, easily visible to the public, stating that said POOL is closed by order of the DIRECTOR and that swimming is prohibited.

(f) After the initial written order to close the PUBLIC SWIMMING POOL is issued, and after the specified corrective action(s) has been taken, the owner, operator or his representative shall notify the DIRECTOR that the PUBLIC SWIMMING POOL is ready for re-inspection.

(g) If upon re-inspection the corrective action is not approved, the PUBLIC SWIMMING POOL shall remain closed and kept out of use until corrective action is approved.

(h) A PERSON shall not remove a notice of closure posted by the DIRECTOR or his/her representative, except with the express written consent of the DIRECTOR.

§4643. Variance.

(a) The DIRECTOR may, on written application and after review, grant a VARIANCE from a specific provision of these rules and regulations, subject to appropriate conditions which shall include a time schedule for compliance when such VARIANCE is in harmony with the general

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purposes and intent of these rules and regulations, and when there are practical difficulties or unnecessary hardship in complying with such provision. The application shall include, but not be limited to:

(1) A citation of the section to which the VARIANCE is requested;

(2) A statement as to why the applicant is unable to comply with the section to which the VARIANCE is requested;

(3) The nature and duration of the VARIANCE requested;

(4) A statement of how the intent of these rules and regulations will be met and the reasons why the public health or SAFETY would not be jeopardized if the VARIANCE was granted; and

(5) A full description of any policies, procedures, or equipment that the applicant proposes to use to rectify any potential increase in health or SAFETY risks created by granting the VARIANCE.

(b) A VARIANCE request from an existing PUBLIC SWIMMING POOL that possessed a valid Sanitary Permit at the time of the effective date of these rules and regulations shall be approved by the DIRECTOR, provided no injuries or disease transmission have occurred in the existing PUBLIC SWIMMING POOL as a result of the deficiency or non-compliance, and the VARIANCE request:

(1) Is not for the requirements of §§4608-4615 and §§4634-4642; and

(2) Will not result in an IMMINENT HEALTH HAZARD.

(c) Any VARIANCE approved pursuant to (b) of this Section shall remain in effect indefinitely until:

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(1) The Sanitary Permit of the existing PUBLIC SWIMMING POOL expires and not renewed within two years from the date of the expiration;

(2) The existing PUBLIC SWIMMING POOL undergoes SUBSTANTIAL ALTERATION; OR

(3) An injury or a disease transmission is documented as a result of the VARIANCE.

(d) The DIRECTOR, not his/her representative, is delegated the authority to approve such VARIANCE.

§4644. Exemption.

A PUBLIC SWIMMING POOL is exempt from the provisions relating to BARRIERS and ENCLOSURES under §4627 and §4630 when all of the following alternative SAFETY measures are in place:

(1) 24-hour manned security;

(2) monitored video surveillance of the entire perimeter of the facility; and

(3) signage posted in a conspicuous place communicating that unauthorized entry is prohibited.

§4645. Severability.

If any provision or the application of any provision of these rules and regulations is held invalid, that invalidity shall not affect other provisions or applications of these rules and regulations.

PROPOSED

Paralyzed miracle dog gets happy ending

By Meghan Swartz
meghan@postguam.com

On a rainy day in early August, Arwen Niles loaded a paralyzed dog and her two puppies found near the airport into the back of her car. She didn't know what could be done to help them, nor that the paralyzed dog – soon christened Mama Dog – would end up staying with her family of three for two months. In those first moments, she just knew she could do something.

Now, nearly eight weeks later, Mama Dog's journey on Guam will end where it began: the A.B. Won Pat International Airport. On Sept. 26, Mama Dog was on an early flight to Hartford, Connecticut, where she'll receive medical care not available on island and settle into a temporary home with a foster parent who Niles said can't wait to meet her.

Before Mama Dog's flight, Niles held a final get-together at Asan Beach Park on Sept. 24, where a small group of Mama Dog's biggest supporters gathered to say goodbye to the friendly, smiling dog, sitting calmly in a red wagon decorated with pink streamers.

Among the group were Niles' husband, Matt Herrygers, without whom Niles said she couldn't have given Mama Dog the care she needed; Tracilynn Kantrud, who organized a paddleboarding fundraiser that brought in $260; Tristi Ah Mu, who organized a GoFundMe campaign that raised more than $6,500; and Amber Fake, who watched Niles' own dog so that Niles and Herrygers could better care of Mama Dog.

Ah Mu brought along a sign to the gathering, which read, "At first they will ask why you're doing it. Later they'll ask how you did it."



MAMA DOG: *Arwen Niles and her son Phineas are shown with Mama Dog, which Niles and her husband Matt Herrygers have fostered for the past two months. On Sept. 26, Mama Dog flew out of Guam, bound for Connecticut, where she'll live with a new foster parent and receive medical treatment. Meghan Swartz/The Guam Daily Post*

> "If it's a matter of resources, then I say, why not try to get them? If you get them, perfect. And if you don't? Again, the animal's not any worse off than if you hadn't tried."
>
> – *Arwen Niles*

Uphill battle

Early on, Niles faced criticism from some who thought Mama Dog should be euthanized and was told by several local veterinarians that they could not help the dog, whose spine appeared to have been fractured, and that the care she needed was not available on Guam.

But Niles refused to give up.

"In the end, the conversation I had with the vet was that it was basically a matter of resources," Niles said. "And if it's a matter of resources, then I say, why not try to get them? If you get them, perfect. And if you don't? Again, the animal's not any worse off than if you hadn't tried."

Two months later, Niles and Mama Dog's other supporters have done all they can – Ah Mu's GoFundMe campaign and a separate PayPal campaign collectively raised more than $10,000 to help cover Mama Dog's travel and medical costs, as well as a donation to PAWS New England, the humane society that will ultimately take responsibility for Mama Dog's care.

In the past weeks, Niles has watched Mama Dog come back to life and has even seen some movement in her back legs. At this point, Niles said, the worst-case scenario is that Mama Dog will use a wheelchair and be pain-free for the rest of her life. But there may be a chance she could walk again.

After many ups and downs, Niles, herself a new mother, is tired. But she says it was all worth it.

"We'll be fine," she said of her family, as they look forward to having a bit more time on their hands after Mama Dog flies out. Years from now, Niles said, the ups and downs of helping the paralyzed pup won't matter when she knows Mama Dog was given the chance to find a forever home and live a full life.

Shortly after taking in Mama Dog, Niles launched a Facebook page as a means of keeping her supporters updated and sharing the dog's story. Over time, the page garnered support for other island dogs in need of foster and forever homes, with 956 people following Mama Dog's story to date.

But even as little as three weeks ago, Mama Dog's future remained uncertain.

In early September, Women United for Animal Welfare – a Los Angeles, California-based humane society – agreed to take in Mama Dog but had no foster home available. It wasn't until weeks later that WUFAW was able to locate a foster parent on the opposite coast, through PAWS New England.

Niles said that in a way, the wait was worth it. Over the past two months, she noted, multiple people offered to foster Mama Dog but ultimately backed out.

"We couldn't have dreamed up a better plan for her," Niles said in her latest Facebook update. "Talk about ending up in the perfect hands!"

Niles said the foster parent, a former vet tech who has wheelchair-bound dogs at home, is the first person she's talked to who has been excited to take Mama Dog into their home.

Island inspiration

Now that Niles knows what's possible, she hopes Mama Dog's story will inspire others to take action and relieve suffering when they see it.

Thanks to social media, Mama Dog's story was shared across territories, states and oceans. Posts from Mama Dog's Facebook page alone have been shared more than 800 times and viewed more than 30,000 times.

"I hope that somebody would see this and say, well crazier things have happened. Somebody's done it so maybe this is possible – let's just see," Niles said. "There's people out there that will help. I think the resources are around, if you fight for them."

"It will have taken exactly (eight) weeks by the time she boards her flight, and the task (was) monumental," Niles wrote in her last Facebook post. "But we finally did it. Thank you to everyone who had a hand in saving this sweet girl's life. Mama Dog's miracle is all yours."

GOVERNMENT OF GUAM
DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES
DIPATTAMENTON SALUT PUPBLEKO YAN SETBISION SUSIAT
123 CHALAN KARETA,MANGILAO, GUAM 96913-6304

EDDIE BAZA CALVO
GOVERNOR
RAY TENORIO
LIEUTENANT GOVERNOR

LEO G. CASIL
ACTING DIRECTOR

NOTICE OF PUBLIC HEARING

PURSUANT TO § 9301, DIVISION 1, CHAPTER 9 TITLE 5 GCA, ALL AGENCIES OF THE GOVERNMENT OF GUAM ARE REQUIRED TO PUBLISH A NOTICE OF PUBLIC HEARING ON THE ADOPTION, PROMULGATION, REPEAL, RECISSION, OR AMENDMENT OF RULES. THE DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES WILL BE ACCEPTING PUBLIC COMMENTS ON THE PROMULGATION OF RULES AND REGULATIONS GOVERNING THE FOLLOWING:

PUBLIC SWIMMING POOL

DATE: Thursday, October 18, 2018
TIME: 3:00 P.M. TO 5:00 P.M.
PLACE: DIVISION OF SENIOR CITIZENS CONFERENCE ROOM, CASTLE MALL, MANGILAO

Copies of the proposed rules and regulations are available for inspection at the Division of Environmental Health (DEH) on the 2nd floor of the Department of Public Health and Social Services in Mangilao, and on the DPHSS webpage at dphss.guam.gov. Please call DEH at 735-7221 for questions and assistance.

/s/ LEO G. CASIL
Acting Director

Doc. No. 35GL-19-0268

The Guam Energy Office will hold a public hearing to discuss Plug-In Electric Vehicle Program procedure updates on **Wednesday, October 3, 2018 from 2:00 pm – 4:00 pm** at the Guam Energy Office, 548 N. Marine Corps Drive, Tamuning.

Motions heard in $2.5M meth case; trial set for Oct. 11

By Louella Losinio
louella@postguam.com

Before heading into a second trial next week, District Court Chief Judge Frances Tydingco-Gatewood heard several motions on a high-profile $2.5 million methamphetamine case. One of the motions asks the court to drop count one of the indictment, which charges the defendants with conspiracy to distribute the drug.

Raymond Martinez and Juanita Moser are accused of conspiring to distribute meth in what authorities have described as the largest seizure of its kind on the island.

The defendant's first jury trial concluded May 21, during which Martinez and Moser pleaded not guilty to the charges. Tydingco-Gatewood declared a mistrial after jurors said they were unable to reach a unanimous verdict and declared themselves "hopelessly deadlocked."

The retrial for the two defendants is scheduled to commence on Oct. 11.

Parties involved in the case appeared Wednesday in the District Court of Guam to argue several motions.

Attorneys David Lujan and Peter Perez, on behalf of the defendants, filed a motion for the court to order striking one count in the second superseding indictment. The defense filed the motion "on the ground that evidence at the first trial has established a material variance, or alternatively, a constructive amendment, of the indictment that renders count one fatally defective as a matter of law."

Count one charges defendants Moser and Martinez with conspiracy to distribute meth.

'Idle chatter'

Attorney Gregory Nicolaysen, another defense counsel, argued that the two defendants did not conspire with former Guam Customs and Quarantine Agency Lt. Henry Alvendia about their alleged plans to smuggle drugs into Guam.

Nicolaysen participated in the hearing by telephone and argued that the taped conversations between Alvendia and the two defendants were "idle chatter."

"It is not the same as forming a criminal agreement," Nicolaysen said.

Frederick Black, an assistant U.S. attorney, said the matter refers to the conspiracy between defendants Moser and Martinez.

The government did not take a strong position on whether Alvendia did or did not join the conspiracy to avoid confusing the jury during the first trial, according to Black.

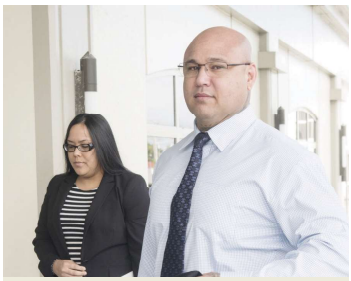
Alvendia had agreed to cooperate as an informant for the government in the case.

Background

Martinez and Moser were arrested in 2015 after being accused of conspiring to bring 8 pounds of meth to Guam from California.

The arrest followed weeks of recorded contact between Martinez, Moser, and Alvendia, about their alleged "elaborate" plans to smuggle the drugs to the island.

Alvendia was charged with receiving bribes and kickbacks while he worked for the government and agreed to cooperate with federal authorities in exchange for a lighter sentence.



DEFENDANTS: *Raymond Martinez and Juanita Moser walk into the District Court of Guam in May. They are accused of conspiring to bring 8 pounds of methamphetamine from California to Guam in 2015. During their upcoming retrial, they're asking for the conspiracy charge to be dropped.*
Norman M. Taruc/The Guam Daily Post

TENORIO continued from page 1

although he would be within the next 24 hours.

"My priorities are the people of Guam," said Tenorio in explaining why he did not appear in court.

He said he was meeting with the remaining two families still sheltered at the Astumbo gym in the wake of Typhoon Mangkhut.

Tenorio, who is the Republican gubernatorial nominee, dismissed the suggestion that he ducked out of the arraignment in order to avoid images of him appearing before a judge in the midst of his campaign for governor of Guam.

"No. Being here is second nature," he said outside the probation office. "I was a police officer for many years" and "I used to testify in this same exact court," he said.

When asked if he could have scheduled the visit to the shelter on another day in order to attend his arraignment, which took about 15 minutes, he said, "I beg to differ. ... It came to a head. At the end of the day, I'm responsible for these folks."

The hearing

During the hearing, the judge disclosed that his chamber clerk and her husband are friends or have worked with several of the potential witnesses in the case. He also said members of his clerk's family have been actively campaigning for Tenorio.

Sison said he did not believe that should disqualify him from the case and neither side objected to having him preside over the trial.

The charges against Tenorio were filed by Assistant Attorney General James Collins. However, chief prosecutor Joseph McDonald appeared in court Wednesday on behalf of the government because Collins was off island.

McDonald said Collins would try the case. He asked the judge to require Tenorio to report to the Hagåtña police precinct within 72 hours for processing and fingerprinting.

Fisher objected, saying "there is no need for it" and the lieutenant governor "was not arrested." He said it wasn't a normal procedure for the attorney general to ask for processing on misdemeanor charges. "Certainly not in the last 20 years," he said.

McDonald also asked "for release on a $1,000 personal recognizance bond, weekly reporting (to) probation, no guns or alcohol, random testing" and an order for Tenorio to stay away from the witnesses in the case.

"The lieutenant governor of Guam is obviously not going anywhere," said Fisher, who argued that no bail was necessary and there was no need for Tenorio to report to probation on a weekly basis. "It's entirely unnecessary," he said.

Fisher also said Tenorio should not be restricted from consuming alcohol, saying, "There is no indication that he was inebriated or drunk, just the opposite."

Sison set no bail terms, saying, "I will not require a PR bond." He ordered that Tenorio report to probation within the next 24 hours for processing and ordered the lieutenant governor to report to the probation office once a month, by telephone.

"I will not make any prohibition with respect to alcohol," the judge said.

The gun grab

Tenorio has admitted to having consumed "two or three beers" when he approached a uniformed on-duty police officer from behind and removed the officer's service revolver from its holster, saying it did not appear to be securely fastened. He said he acted in the interest of public safety and maintains he did not commit a crime.

However, the complaint filed by the attorney general against Tenorio on Sept. 17 tells a different story.

In that complaint, Sgt. Carl Cruz, whose gun was grabbed, states that his firearm was "properly holstered." He accused Tenorio of trying to seize his handgun on six occasions that night. He said Tenorio "reeked of alcohol and that his face was red." Several other officers who witnessed the incident filed similar statements.

GUAM HOUSING AND URBAN RENEWAL AUTHORITY

Board of Commissioners Meeting
12:00 P.M., Thursday, October 11, 2018
GHURA Main Office
1st Floor Conference Room
117 Bien Venida Avenue, Sinajana

For special accommodation, contact Ms. Kathy Taitano
Tele No. 475-1322 or TTY #472-3701

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Copies of the proposed rules and regulations are available for inspection at the Division of Environmental Health (DEH) on the 2nd floor of the Department of Public Health and Social Services in Mangilao, and on the DPHSS webpage at dphss.guam.gov. Please call DEH at 735-7221 for questions and assistance.

Doc. No. 35GL-19-0269.*CD

/s/ LEO G. CASIL
Acting Director

MINUTES OF PUBLIC HEARING
Proposed Rules and Regulations
For Public Swimming Pools
October 18, 2018 (3:00pm – 5:00pm)
Division of Senior Citizens, Conference Room
Castle Mall, Mangilao

Division of Environmental Health (DEH) Attendance	Tom Nadeau, Chief Environmental Public Health Officer (EPHO) Marilou Scroggs, EPHO Administrator Leilani Navarro, EPHO I	
TOPICS	**DEH**	**PUBLIC**
I. Opening Remarks	Marilou Scroggs (MS) started the Public Hearing by reading the following opening remarks: "Hafa Adai! It is now 3:00 PM, on October 18, 2018. My name is Marilou Scroggs; I am an Environmental Public Health Officer Administrator for the Bureau of Inspection and Enforcement of the Division of Environmental Health of the Department of Public Health and Social Services. On behalf of the Acting Director of this Department, Mr. Leo G. Casil, we welcome you all to this public hearing where we will be accepting and hearing comments to the proposed *Rules and Regulations for Public Swimming Pools*. With me today are Mr. Thomas Nadeau, Chief Environmental Public Health Officer of the Division of Environmental Health, and Ms. Leilani Navarro, Environmental Public Health Officer for the Bureau of Inspection and Enforcement. Title 10 GCA, Chapter 21 mandates the Division of Environmental Health, or DEH, to regulate the sanitary operation of public swimming pools. Section 29101(c) of Chapter 29 of the same code defines "public swimming pool" as, "any swimming pool that is available for public use, whether for a fee or free of charge, or any swimming pool used by any business, partnership, corporation or person for the use of their customers, clients, guests or employees including, but not limited to: a commercial pool; a community pool or pool at a hotel, motel, resort, auto park, trailer park, apartment house, or other multiple rental unit; private club; public club; and public or private school, gymnasium, or health establishment." To carry out the provisions of these mandates, Section 20105 of Title 10 GCA, Chapter 20 authorizes the Director of the Department of Public Health and	

	Social Services to adopt and promulgate rules and regulations, as necessary. The promulgation of rules and regulations is governed by the Administrative Adjudication Law (Title 5, Chapter 9, Guam Code Annotated), and Section 9301 of that law requires that at least 10 days before the public hearing, a notice must appear in a newspaper of general circulation in Guam announcing the date, time, and place of the public hearing. The Department did comply with that provision by publishing the announcement in *The Guam Daily Post* on September 30, 2018 and October 4, 2018. Copies of the proposed rules and regulations were also made available at the DEH office and on the Department website as required by law. As part of Administrative Adjudication Law procedures, an Economic Impact Statement was prepared. DEH estimates that the total economic impact of complying with the existing provisions and the new requirements in the proposed regulations would be about $9,506,775, as determined by a survey conducted by the Department. In regulating public swimming pools, DEH is mandated to issue Sanitary Permits to all qualifying public swimming pools. The standards required of swimming pools in the acquisition of such permit are outlined in the current *Rules and Regulations Relating to Public Swimming Pools* which was adopted in 1980. DEH has determined that the existing regulations are inadequate in protecting the health and safety of bathers on Guam. Thus, the Department seeks to update these rules and regulations by utilizing the minimum standards recommended by the Model Aquatic Health Code, or MAHC. The MAHC is a guidance document developed by the U.S. Centers for Disease Control and Prevention together with regulators, aquatics sector, and academia to reduce the incidence of recreational water illnesses, injuries, and drownings. Some of the most significant changes to the proposed regulations are: needing to provide barriers and enclosures around new and substantially altered pools; requirements for diaper changing stations for pools intended to be used by children less than five years of age; needing to provide a dedicated chemical storage space; and requirements for a qualified operator	

	in certain types of pools. The proposed regulations also detail how compliance inspections by DEH will be conducted. Based on the responses received in the economic impact survey and feedbacks obtained during stakeholder meeting, the Department is further proposing to exempt existing, permitted facilities from some of the existing and proposed requirements, such as those relating to pool surface and finish; pool access and egress; and barriers and enclosures. Thus, the actual economic impact of the proposed regulations will be significantly less than the amount indicated in the Economic Impact Statement, as most of the existing facilities would not need to expend resources to comply with these provisions. We will now formally accept any written or oral testimonies on the proposed rules and regulations. Dangkolo Na Si Yu'os Ma'ase!" Tom Nadeau (TN) asked the first attendee to come to the front so that he may be formally introduced for the record.	
II. Oral or Written Testimonies	TN confirmed that the Division is still proposing to exempt existing facilities from the said provision.	Mr. Robert San Agustin moved to the front and introduced himself as the facilities manager for the Hilton Guam Resort and Spa. Mr. San Agustin said that in a previous meeting with hotel managers, there were a lot of concern about the proposed requirement regarding "barricades" or fencing around swimming pools. He said that the concern is not necessarily due to the cost of putting up the fences but rather on the aesthetics aspect. He wanted to ask if the plan is still in place to exempt existing facilities from this requirement. Mr. San Agustin then asked what kind of test kit the Division is planning to use to test pool water quality. He wanted to know if test strips, reagents, or liquids are going to be used because he wanted to make sure that their readings are going to

		be the same as the readings obtained by inspectors.
	Leilani Navarro (LN) thanked Mr. San Agustin for coming to the Public Hearing and providing his comments on the proposed regulations. She responded that language is provided in the proposed regulations for existing, permitted facilities to be exempted from the barriers and enclosures requirement. In response to the question on which test kit to be used, LN said that any test kit that is certified to NSF/ANSI 50 Standard is acceptable for use.	
		Mr. San Agustin then proceeded to comment on the provision for chemical storage space. He asked if a certain amount of chemicals (at least for use within the day) may be allowed to be kept in the pump room. He said that consumption of chemicals varies on a daily basis, depending on some factors, such as bather load and sunlight exposure. He stated that it would be difficult for them to go from one end of the property (where the chemical room is located) to the other end of the property where the pump room is. He mentioned that this increases the hazards of transporting the chemicals.
	LN responded by saying that she understands the concerns regarding difficulty or safety of transporting chemicals from one place to another, as well as the need for ease of access for chemicals when needed. She added that the provision for keeping chemicals away from the equipment room was a standard requirement in the Model Aquatic Health Code to prevent chemical injuries due to possible reaction with combustion-producing equipment in the pump room. However, she said that his comment was duly noted and that this will be discussed and evaluated by DEH. TN then asked Mr. San Agustin where their chemicals are currently being stored.	
		Mr. San Agustin said that they have two storage areas: one is the bulk storage room, which is away from the building, and the second one is the pump room, where they keep about two containers of chemicals.

	TN asked how big the chemical containers were that they kept in the pump room.	Mr. San Agustin answered that the containers are about five gallons or 50 pounds each.
	TN inquired what specific chemicals were kept in these containers.	Mr. San Agustin said they keep calcium hypochlorite, the chemical for "shocking" the pool, and cyanuric acid.
	TN stated that chemicals such as calcium hypochlorite are caustic, and thus, are prohibited in the pump room per the proposed regulations. LN added that chemicals stored with combustion-producing equipment pose a safety hazard.	Mr. San Agustin said that their chemicals are stored in a heater room, which is more like a refrigeration-type of equipment.
	TN asked for clarification on how much chemicals Mr. San Agustin is asking to store in the pump room.	Mr. San Agustin replied that a day's worth of chemicals be kept next to equipment.
	TN probed if a day's worth of chemicals is about 50 gallons.	Mr. San Agustin answered that it may be about 50 pounds of calcium hypochlorite. He added that they also keep about 5 gallons of cyanuric acid in another pump room.
	TN assured Mr. San Agustin that his comment will be taken into consideration during the review of the proposed regulations. He then asked what other chemicals are being kept in the pump room.	Mr. San Agustin responded that they have cyanuric acid, calcium hypochlorite, and bromine in the pump room. He mentioned that the EPA (Guam Environmental Protection Agency) allows them to store a maximum of two containers of chemicals in the pump room.

	MS inquired for how long does Guam EPA allow for the storage of such chemicals in the pump room.	
		Mr. San Agustin said he did not know the length of time EPA allows for this storage and he only heard it from one of the people who attended the training. He stated that it is impractical to keep only an hour's worth of chemicals as the demand changes depending on the weather and the number of swimmers.
	TN repeated that Mr. San Agustin's comment is acknowledged and it will be reviewed. LN asked how far away is their chemical storage room from the pump room.	
		Mr. San Agustin answered that the chemical room is in their garage, which is about 300 feet from the pump room.
	TN asked Mr. San Agustin if he had any other comments or concerns with the proposed regulations.	
		Mr. San Agustin said that was all for now as he was not able to finish reviewing the whole document.
	TN stated that the Division will be accepting testimonies, preferably in writing, via email or hand delivery to the Department, up to 10 days after the public hearing.	
		Mr. San Agustin acknowledged TN's statement and said that he was finished with his testimony for the time being.
	TN then requested Ms. Mary Rhodes to sign in the attendance sheet. LN invited Ms. Rhodes to take the front seat and state her name for the record.	
		Ms. Rhodes said that she is the president of the Guam Hotel and Restaurant Association (GHRA). She said that she came to the public hearing to show GHRA's support and cooperation with DPHSS. She further stated that they are currently in the process of compiling data from their members and their board is still reviewing their official response to

		the proposed regulations. She proceeded to say that she would be commenting on some of the key issues they have with the proposed regulations. Ms. Rhodes said that their engineering department has noticed that there are some things in the proposed regulations that are not being used in swimming pools anymore, such as chlorine gas, which she believed is now only being used by the Guam Waterworks Authority.
	TN responded that there are some jurisdictions that may still be using chlorine gas and that provision was included in the proposed regulations in the event that someone tries to introduce its use here on Guam.	
		Ms. Rhodes stated that GHRA felt that some of the sections in the proposed regulations fall under the purview of other agencies, such as EPA and OSHA (Occupational Safety and Health Administration). She said that they did not want DPHSS to overreach and have too many regulations that already exist in the books. Ms. Rhodes expressed that the following are the key issues that GHRA has with regards to the proposed regulations: 1. Barriers and enclosures – She said that the requirement for six feet high fence is not reasonable. GHRA wants to get an exemption from this requirement for all hotels so that its members do not have to fill out a variance form. She said that Hawaii exempts hotels from the barriers and enclosures requirement because they already have precautionary measures in place to prevent pool access. She said that aesthetics plays a huge part in attracting guests to Guam as an island resort destination, and a lot of money has been spent on the design, landscaping, and maintenance of the pool surroundings. GHRA feels that they have already spent a

		substantial amount of money for signage and surveillance to deter unauthorized access. In addition, Ms. Rhodes mentioned that the presence of barriers and enclosures limit visibility for parents and guests, and may also hinder entry of emergency personnel. 2. Lighting – GHRA feels that their members are good examples for other facilities to follow when it comes to coming into compliance with lighting and other requirements. GHRA is willing to reach out to other facilities to educate them and help them comply with pool maintenance requirements, similar to what GHRA has done with the Guam Food Code. 3. Diaper changing stations – A lot of the GHRA members already have diaper changing stations and most members are amenable to providing diaper changing stations even in the male restrooms. 4. Number and distance of showers – There are some concerns about the percentages of showers required and also the distance between the showers. GHRA thinks that requiring showers to be 50 feet apart is unreasonable. Its members already have showers, although these may not meet the number or distance requirement in the proposed regulations. 5. Compliance and enforcement – GHRA wants to find out if there is going to be enough funding and staffing to enforce the proposed regulations. GHRA has concerns about the enforcement of requirements such as showering after urination. Ms. Rhodes suggested that some of the language used can be simplified such that it is not so detailed.

	TN responded that DEH sometimes conducts inspections on weekends, as needed.	6. Chemical storage and maintenance – Hotels fluctuate chemical dosing according to the anticipated number of guests and other factors. Ms. Rhodes said that the most important thing is that hotels have a regular schedule of when they treat the water, and she further commented that manual dosing is more costly and inefficient. She stated that it is unreasonable to be very specific in the law when it comes to chemical dosing because dosing would depend on the number and frequency of guests that come in. She also wanted to find out the schedule of enforcement as she thought DEH only operates Mondays through Fridays. 7. Incident reporting – GHRA feels that it is unnecessary and would be difficult for their staff to report every incident. Ms. Rhodes said that this would create another layer of bureaucracy, and that it would increase their liability. She added that they already report incidents to GPD (Guam Police Department) and medical personnel, and that investigations need to be conducted first to determine the root cause of the incident. 8. Inspection and grading – GHRA is concerned about the grading system being subjective and unnecessary. Ms. Rhodes said that she is worried about the message and branding that the grading system will send to the tourists, considering that 60% of the GDP (Gross Domestic Product) on Guam comes from the tourism industry.

		Ms. Rhodes stated that is the gist of GHRA's issues with the proposed regulations.
	TN invited Ms. Rhodes to submit a written testimony so that DEH can respond to their issues line by line.	
		Ms. Rhodes asked if they would be given 10 calendar days or 10 business days to turn in their written testimony.
	TN responded that there is no set time specified in the AAL (Administrative Adjudication Law) on when to submit additional testimony after the public hearing. But per Department policy, they would be given 10 business days, similar to what is provided during legislative public hearing.	
		Ms. Rhodes acknowledged and said that they would submit their official written testimony within 10 business days.
	TN stated that he understood that GHRA is opposing the requirement on barriers and enclosures, and that the Department is currently proposing to make an exemption for all existing pools. He wanted to know if GHRA is seeking to exempt newly constructed swimming pools as well.	
		Ms. Rhodes answered that it is GHRA's position to request for an exemption for all hotels and resorts, regardless if it's existing or newly built, because they did not want this provision to hinder new investors from coming to the island. She said that tourism is the number one industry in Guam and they want it to further grow.
	TN reminded Ms. Rhodes of his request for a list of safety measures that GHRA members already have in place or proposes to use to prevent unauthorized pool access and drowning. He said that these measures may be included in the language of the regulations as a possible alternative to the barrier/fencing requirement.	
		Ms. Rhodes said that they will provide the list of alternative measures which she had previously mentioned, such as 24-hour security and after-hours signage.
	TN then asked for clarification about the concern on lighting. He asked if Ms. Rhodes was referring to color or intensity of light.	

		Ms. Rhodes replied that the regulations mention "about floors and walls that are light in color… in depths less than three feet." She added that most of the hotel pools are already compliant with this requirement, especially on the "lighter paint." She asked if this provision was only for new pools.
	TN responded that this is a requirement for both new and existing pools.	
		Ms. Rhodes commented that the regulations are very specific as to the number of lighting in the pool, which she feels is unreasonable.
	LN asked if Ms. Rhodes was talking about intensity of light or the color of pool floors and walls.	
		Ms. Rhodes answered, "All of it."
	TN commented that one of the criticisms that the Division encounters, especially with the old regulations, is that some of the language is vague. He added that one good example is "light in color." One person's interpretation of "light in color" may be different from the interpretation of another person. He said that this is the reason why DEH put specific standard, such as 10-foot candle for light intensity. He stated that this is done to promote consistency and uniformity, and prevent ambiguity and subjectivity. TN then asked for confirmation if there was any issue with the lighting provision, aside from it being very specific.	
		Ms. Rhodes said that GHRA was wondering why the provision was there considering that there is so much natural light in Guam.
	TN repeated that the language was put there to avoid ambiguity and vague interpretation. He added that if there is no detailed standard, then there really is no standard. He also said that lighting has rarely been an issue during compliance inspections conducted by the Division. TN then proceeded to ask about the next issue brought up by GHRA, which was regarding	

	diaper-changing stations. He said that diaper-changing station is not required per se in the male restroom. LN confirmed this and added that the minimum requirement is one unisex diaper-changing station.	
		Ms. Rhodes said that a lot the hotels already have this.
	TN moved on to the next issue, which was about the shower requirement. He asked whether GHRA's issue with the shower requirement is in terms of the ratio.	
		Ms. Rhodes replied that the language on when to take a full shower is too specific, and that to require the installation of showers every 50 feet is unreasonable.
	TN asked if there was any alternative that GHRA is offering in lieu of this.	
		Ms. Rhodes said that the whole section on showers need to be re-visited because she thought that it was odd and un-enforceable to ask bathers to shower after every urination. She said that the language has to be simplified so that it would not seem so weird.
	TN responded that the Division will look into this provision, but asked that GHRA submit a possible alternative proposal.	
		Ms. Rhodes offered to help in writing alternative language to simplify this section.
	TN welcomed Ms. Rhodes' offer and went on to address the issue about inspections. He said that DEH conducts inspections after-hours, on weekends, and sometimes during holidays. He added that, by law, DEH is compelled to conduct quarterly inspections of regulated facilities. Although DEH presently does not have the ability to do four inspections of every facility, every year, he said that the Division does its best to monitor and inspect pools at least once a year. He further stated that once these regulations are adopted, DEH will conduct pool inspections more frequently.	

	TN said that the issue on chemical storage was already brought up by Mr. San Agustin from Hilton and that DEH will review that provision. Next, TN commented on the issue about the existence of other laws that may be redundant to what DEH is seeking. He said that the Division tries to be consistent with other laws, but it is not always possible, and mentioned the "Every Child is Entitled to an Adequate Public Education Act" as an example. TN elaborated that this particular law requires classrooms to be no higher than 78^0F, which the Division believes is unreasonable, and consequently, it instead enforces the room temperature standard of ASHRAE. TN further added that DEH does not have authority over other agencies, and due to differing standards, the regulatee will need to comply with the more stringent law. In response to the issue on incident and illness reporting, TN mentioned that public health is seeking this requirement in the proposal to collect data that will drive policy-making, like syndromic surveillance for disease control. The pool data that DEH seeks will be used to justify the addition, or even the elimination of regulations or parts of regulations. TN also added that he was surprised to learn about the multiple unreported near-drowning incidents that occurred in Guam's hotel pools, which were mentioned at the recent GHRA general membership meeting that he had attended a few weeks ago. He said that DPHSS would want to know about these kinds of incidents to learn the cause, how it happened, etc. to prevent it from reoccurring. TN replied that DEH seeks to find the cause of the incident, and not necessarily who is at fault. TN commented that DEH regulates pools, and as such, it would want to know all hazards	Ms. Rhodes responded that GHRA sees potential liability to the involved hotel for preparing such document. Ms. Rhodes countered that, for sure, DPHSS will be on site to inspect, which may lead to unnecessary investigations. Ms. Rhodes also said that GMH (Guam Memorial Hospital) is not required to report all near-death scenarios.

	associated with the pool. He then added that DEH will review this issue, like the other comments that were submitted. TN addressed the issue on grading. He stated that DEH is mandated by law to implement a demerit/grading system, and such grading was added to the proposed regulations for convenience and quick access to the requirements because the current regulations does not have it. MS responded that DEH will create the demerit system once the regulations are finalized. TN said that DEH did not include the actual inspection report with the demerit system in the event further changes are necessary in the future. TN added that DEH will put a language in the proposed regulations that will indicate that violations will reflect the corresponding regulatory action; thus, the greater the violation, the greater the regulatory response. TN then thanked Ms. Rhodes for her comments. He reiterated that the Division will be accepting written testimony in the next 10 business days. The written testimonies will be reviewed, and the proposed regulations will be revised, as necessary, based on the comments received. After 10 days, DEH will submit the proposed regulations to the AG for legal review. Upon completion of the AG's review, it will be submitted to the Governor for review, and if approved, the Governor will transmit the proposal to the Legislature. Then the Legislature has 90 days to decide on what action to pursue – either accept it as is, have another public hearing, or revise it. If no action is taken by the Legislature after the 90 days, then it is adopted. TN added that as a courtesy, the Division will provide GHRA a copy of the final packet that will be transmitted to the Governor.	Ms. Rhodes commented that DEH is adding another layer to what it is currently mandated to do. She said that the statute is only referring to a demerit system, and not a grading system. Ms. Rhodes also said that she would like to see how the proposed demerit system would look like.

	As there were no further comments from the public, LN paused the recording at 4:17 pm and indicated that recording will resume if new attendees or speakers arrive.	Ms. Rhodes said that she appreciated the additional time to submit written testimony, and repeated that she would like to work with DPHSS on these regulations. Mr. San Agustin stated that Hilton will submit their comments to GHRA so that they can be combined into one written testimony.
III. Closing	LN officially closed the Public Hearing on the Rules and Regulations for Public Swimming Pools at 5:00pm, on October 18, 2018.	