

bbwilbur@frontier.com

From: <bspetersen@earthlink.net>
Date: Sunday, February 10, 2013 12:18 PM
To: "Bob Wilbur" <bbwilbur@broadstripe.net>; "Dan'l Jones" <dan_serv@hotmail.com>; <tdahl@shorelinefire.com>; <cedars@olypen.com>; "Gwyn Staton" <gwynstaton1@msn.com>
Cc: "Cathie" <cathianne@aol.com>; <whshed@live.com>; <htrain4@gmail.com>; "Maria Chamberlain" <hermitanamarca@gmail.com>; "Jean Salls" <jean_salls2000@yahoo.com>; "Gwyn Staton" <gwynstaton1@msn.com>; "Suzy Palmer" <suzypalmer1@me.com>
Subject: RE: American Red Cross Guideline

Ed – Not sure where all of this thread started as this is the first mail I have received on this discussion. Going back to Ed's bottom comment on raising the deep to no less than 9 feet, "Is that still within the specifications where we can fill it in and still put the plumbing to add the drain?" If so, I would most likely be in favor of that option once all of the information has been discussed.

Regarding the slide, I think that idea is worth investigating and is a great attraction that even adults would find fun. As for the possibility of the falling of the ladder danger, there are also types that are tubes that you can see through. On the other hand, adults seem to congregate at the deep end to get away from the children that are at play and don't interfere with those that are lap swimming.

From: Bob Wilbur [mailto:bbwilbur@broadstripe.net]
Sent: Saturday, February 09, 2013 6:03 PM
To: Dan'l Jones; tdahl@shorelinefire.com; cedars@olypen.com; Gwyn Staton; Susie Petersen (preferred)
Cc: Cathie; whshed@live.com; htrain4@gmail.com; Maria Chamberlain; Jean Salls; Gwyn Staton; Suzy Palmer
Subject: Re: American Red Cross Guideline

All,

Since most agree we face a tough funding vote, consideration of slides and similar embellishments probably need to go into phase 2 or 3 or be funded creatively after the nuts and bolts are actually paid for and in place. Might that be a long-range planning item?

But turning to safety, has there been any sort of analysis done on release forms and liability matters. That is, is one release form as good as another in court and how do life guards influence matters (that being a question for which committee, Pool Op and Safety or maybe our Committee of Mediocre Legal Council)?

Dan, I must disagree re your diving-dampening sub-thesis and the bold assertion that most people are naturally poor divers. Although I never possessed great swimming talent, I perfected quite readily and with little to no practice the highly acclaimed double-reverse cannonball belly flop, which I can safely perform in 1 foot of water followed by a flip turn out of the pool. And should the opportunity present itself....bob

From: [Dan'l Jones](#)
Sent: Saturday, February 09, 2013 8:31 AM
To: [tdahl@shorelinefire.com](#) ; [cedars@olypen.com](#)
Cc: [Cathie](#) ; [whshed@live.com](#) ; [htrain4@gmail.com](#) ; [Bob Wilbur](#) ; [Maria Chamberlain](#) ; [Jean Salls](#) ; [Gwyn Staton](#) ; [Suzy Palmer](#)
Subject: RE: American Red Cross Guideline

I don't think that whether or not a pool allows diving has much impact on where an individual chooses to swim there, unless they are training for competition. Most people cannot and do not dive well anyway. The overwhelming number of children are afraid to enter the water head first. Diving head first is contrary to our natural instincts. As a child, I admired those who could use a diving board, but like most, was afraid to try it. Now, put a slide in the pool, and everyone wants to try it. They are fun.

Let's not rule out things before we investigate them thoroughly. I have always been a proponent of a pool slide over a diving board, but people wrongfully assume that they are inherently unsafe and dismiss the idea. The old diving well is an excellent location for a slide, not because of the depth, but because it provides a somewhat sheltered area to enter the water without having to slide on top of other swimmers. Depth is not a significant factor when it comes to slides anyway, and the location of the slide is not that big a consideration as long as behavior of the users is controlled. I would vote yes for a slide and here's why:

WE HAVE LIFEGUARDS

I think everyone is forgetting why our pool has never had a single claim filed against it since it first opened; we have a well-managed pool with lifeguards. Lifeguards are the single greatest safety feature any pool can have and overcome a multitude of what are otherwise unsafe conditions or situations.

We had a diving board for all except the last six years the pool was opened. There were no diving accidents, because we had lifeguards. No one was allowed to make a running start on the diving board. No one was permitted to dive until the diving area was clear.

Lifeguards maintain order, prevent running, keep alcohol out of the compound, make sure babies are properly attired to prevent accidental contamination, and ensure there is no horse play.

Lifeguards are one of two kinds of employees mentioned in our bylaws, and are automatic (non-voting because the decisions affect their jobs) members of the Pool Operation and Safety Committee. They are the ONLY committee members that do not have to be appointed by the president.

SLIDES ARE FUN AND SAFE

Slides are a fun and wonderful attraction, much more so than a diving board, starting blocks, or allowing diving from the deck. Slides are inexpensive and safe. Anyone ever been to a water park? Slides are the most used feature. These parks have no diving boards.

A slide is actually a much safer device than a diving board, because it directs the angle of the entry into the water, avoiding the dreaded consequences of the "spinal wall" in a pool, the gradual slope from the diving well that can injure tall people or those who make high-speed, head-first dives. Pool slides have to meet strict standards of the code of federal regulations, and because of these design standards, water depth is not a great concern (usually 3 to 3 1/2 feet is adequate).

<http://law.justia.com/cfr/title16/16-2.0.1.2.37.html#16:2.0.1.2.37.0.1.5> http://www.ehow.com/info/8697440_deep-pool-slide.html

WE HAVE ORDERLY, WELL-BEHAVED SWIMMERS

Our swimmers are orderly and well behaved, because we have always had lifeguards. Our swimmers have been conditioned to be safe and considerate of others, because they have not only had posted rules to guide them, but those rules have been enforced by management and competent, well-trained lifeguards.

With that in mind, let's try not to wander off into the realm of safety speculation without recognizing the safety feature above all other safety features, the people we pay

to protect our patrons. Let's not rule out a feature that is relatively inexpensive, easy to maintain, a huge attractin, and one of the safest fun devices a pool can have installed.

Please consider these factors before ruling out a slide.

Thanks,

Dan'l

From: TDahl@shorelinefire.com
 To: cedars@olypen.com
 CC: dan_serv@hotmail.com; cathianne@aol.com; whshed@live.com; htrain4@gmail.com; bbwilbur@broadstripe.net; hermitanamarca@gmail.com; jean_salls2000@yahoo.com; gwynstator1@msn.com; suzypalmer1@me.com
 Date: Sat, 9 Feb 2013 00:28:46 -0800
 Subject: RE: American Red Cross Guideline

Further clarification,

While I certainly didn't mean to imply that the committee was charged with making the final decisions, we will have to develop consensus and *decide* what recommendations that we ultimately make (such as pool depth). Reality, practicality and legal requirements will make many of our decisions for us.

As I stated safety is an obvious priority. Safety concerns with any equipment or design considerations are valid and worthy of reasonable discussion.

I did not mean to represent myself as promoting a slide, I simply was adding it to one of the considerations to take into account regarding pool depth should the committee or anyone else in the future want to consider the option. As I stated in the meeting, I am trying to make sure we give consideration to potential future uses and not make (unintentional) decisions that would limit future possibilities (when feasible).

The report will likely address many of these issues, and certainly we will need to review it and other pieces of information to guide us on making our recommendations. I hope that doesn't preclude us from sharing ideas and information that we find along the way. I'm encouraged at the level of consensus that I feel we're already developing in many of these areas.

Thanks for the discussion,

Tim

From: Sue Corliss [<mailto:cedars@olypen.com>]
Sent: Friday, February 08, 2013 11:37 PM
To: Dahl, Tim (BC)
Cc: Dan'l Jones; Cathie; whshed@live.com; htrain4@gmail.com; Bob Wilbur; Maria Chamberlain; Jean Salls; Gwyn Stator; Suzy Palmer
Subject: Re: American Red Cross Guideline

Good Evening All

I don't think the purpose of our committee is to make ANY decisions, only recommendations. But if we are worried about any kind of diving, putting a SLIDE in is really putting us in harms way. A slide has height and shallow walls. We then have the kids that don't wait their turn, very possibly the same kids that would break any other rules set down. Hopefully the consultant's report will be ready soon so the committee can review it and then we can have a meeting and discuss what options may be available.

See you at the Board meeting tomorrow (2PM)

Sue Corliss
 360 678 3731
cedars@olypen.com

On Feb 8, 2013, at 1:50 PM, Dahl, Tim (BC) wrote:

Clarification: As Dan'l stated most of the users are adults...what I meant to say was the "the major users are kids"... which I based on Dan'ls statement.

Thanks,

Tim

From: Dahl, Tim (BC)
Sent: Friday, February 08, 2013 1:45 PM
To: 'Dan'l Jones'; Cathie; whshed@live.com; cedars@olypen.com; htrain4@gmail.com; Bob Wilbur; Maria Chamberlain; Jean Salls; Gwyn Stator; Suzy Palmer
Subject: RE: American Red Cross Guideline

All,

I think it's important to make sure that we identify consensus where we can:

Clearly, ANY decisions regarding any of the design elements will follow State law. This should not preclude consideration of additional information when considering decisions that are WITHIN the standard(s) established under RCW. (Discretionary)

Also, construction requirements and practical considerations (including cost) will also dictate depth feasibility to some extent.

If we are talking about wanting to ALLOW edge diving, then these issues might deserve consideration. A bridge only to be crossed based on the results of the above. The issue of allowing "edge diving" may be moot. I believe the concern expressed is that IF someone does break the rules and dives in, can we somewhat mitigate the likelihood of injury.

I think it's safe to say that no one is talking about putting in a diving board, so let's not bog ourselves down with any discussion regarding diving from greater than 12" above water.

The depth of the pool relative to the tidal level is a real issue that I believe everyone is aware of and should be discussed in the consultant's report. This may require a cost/benefit discussion being part of any final decision.

Having said all that, given that a majority of the pool users are kids:

bsolute compliance with the rules is improbable at best, irrespective of how well our lifeguards enforce them.

is important to remember that a pool is a RECREATIONAL facility (read that "fun"). While legal compliance and safety are obvious priorities, let's not miss opportunities to keep it fun – or even make it more fun. (And yes, functional for those who want to use it strictly for exercise.)

any kids (and adults) like the added recreation of swimming in the deep end (ie: swimming to the bottom or diving for sunken objects.)

ne issue that came up was the ability to rent out the use of the pool for SCUBA classes that has a depth requirement of (I think he said) 6' – This may be a year round possibility for a small amount of income.

ne issue that I'm not sure we have considered is the idea of a slide. I know that the Klahaya pool faced a similar issue on their project and installed a slide where the diving board had been. My limited research hasn't found any requirements other than "manufacturer's requirements". But I believe in discussion with one of the players in that project that it was considerable less depth required (more research needed).

It's LIKELY that the deep end will be getting shallower. Time (study, feasibility, cost and reasoned discussion) will likely dictate how much shallower.

I look forward to receiving more information and our reasoned discussion to guide us towards the best result. Thanks to all for your passion and involvement.

Tim

From: Dan'l Jones [mailto:dan_serv@hotmail.com]

Sent: Friday, February 08, 2013 12:27 PM

To: Cathie; whshed@live.com; cedars@olypen.com; htrain4@gmail.com; Bob Wilbur; Maria Chamberlain; Jean Salls; Gwyn Staton; Dahl, Tim (BC); Suzy Palmer

Subject: RE: American Red Cross Guideline

I think it would be prudent to continue the "no diving rule" currently in effect at our pool. The lifeguards enforce the no diving rule very well. The pool deck is clearly marked "NO DIVING". The "deep end" where diving from the deck might be attempted ranges from 7 feet to 10 feet. The pool is not appropriate for diving in the lanes, except by trained, competitive swimmers. We cannot afford to allow diving. Fort Casey is a shallow pool and has had no serious diving injuries, because their lifeguards too are good at enforcing the no diving rule.

The current 10-foot depth in the old diving well is below sea level and everyone we hire needs to understand that limitation. It is not something that is readily apparent. They need to consider the engineering problems posed by tidal action before emptying the pool and time their work accordingly. Filling in the deep end would eliminate that concern. The depth of the deep end is no longer adequate for a diving board anyway. Lowering the depth would solve many problems encountered in maintaining the pool. It would not prevent diving by trained, competitive swimmers.

The American Red Cross is not the standard under Washington state law. We simply need to abide by RCW 70.90 and WAC 246-260. If a contractor or consultant doesn't know about it, they should not even be considered for the job.

RCW 70.90.160 Modification or construction of facility — Permit required — Submission of plans.

A permit is required for any modification to or construction of any recreational water contact facility after June 11, 1986, and for any other water recreation facility after July 26, 1987. Water recreation facilities existing on July 26, 1987, which do not comply with the design and construction requirements established by the state board of health under this chapter may continue to operate without modification to or replacement of the existing physical plant, provided the water quality, sanitation, and life saving equipment are in compliance with the requirements established under this chapter. However, if any modifications are made to the physical plant of an existing water recreation facility the modifications shall comply with the requirements established under this chapter. The plans and specifications for the modification or construction shall be submitted to the applicable local authority or the department as applicable, but a person shall not be required to submit plans at both the state and local levels or apply for both a state and local permit. The plans shall be reviewed and may be approved or rejected or modifications or conditions imposed consistent with this chapter as the public health or safety may require, and a permit shall be issued or denied within thirty days of submittal.

The Rules that were promulgated in accordance with the requirements of the Revised Code of Washington can be found in the Washington Administrative Code.

WAC 246-260-041

(5) **Specific design requirements for pools furnishing areas for diving.** Owners shall ensure areas designated for diving activities include a diving envelope meeting minimum requirements in:

- (a) D-8.01, Table 1, APHA Public Pool Regulations, 1981, if the pool user would enter from the deck level twelve inches or less from water surface level.
- (b) CNCA standard configuration in areas where user would enter from the deck level over twelve inches from water level, or has a platform or diving board provided at a height of less than one-half meter (twenty inches). This requirement is based on a standard described under CNCA publication *Swimming Pools: A Guide to Their Planning, Design, and Operation* 1987, Fourth Edition. Human Kinetics Publisher, Inc., Champaign, Illinois, Figure 8.1; or
- (c) Dimensions for Diving Facilities, FINA facility rules, 2000-2001, if the pool user enters from the diving board or platform at a height of twenty inches (one-half meter) or greater from water surface level.

The books cited in the above code can be purchased online inexpensively. The rules apply not only to depth, but slope and other dimensions as well. I strongly recommend that we not try to make up our own standards or make changes that increase liability, cost, or that may endanger our pool patrons.

Per the Washington Administrative Code and the Revised Code of Washington, when it comes to any diving in our pool, the standards with which we must adhere are those of:

- The American Public Health Association (APHA),
- The Council for National Cooperation in Aquatics (CNCA), and
- The Federation Internationale de Natation (FINA)

The Federation Internationale de Natation, or FINA, is the international organization for competitive diving. FINA requires a minimum depth of 3.4 meters (prefer 3.5 meters) for a 1-meter high diving board, or about 11 feet 6 inches deep for a 3-foot high board, and at least 4.5 meters for a 10-meter high platform board.

The National Foundation for Spinal Health specifies a minimum 3 1/2 feet for any diving, 3 1/2-4 feet for dives from platforms of 18 inches above the water and 4+ feet for platforms up to 30 inches high, but these are not the standards for state law either. Statistical analyses show that the vast majority of accidents occur in water depths of about 3 1/4 feet or less. One study reports only 13% of accidents occurred in depths of 3 1/4 -9 feet. The "spinal wall" in our pool, the contour from the deep end diving well, is the real "danger" posed when we allow diving, not the depth itself.

Historically, more adults have signed in to use our pool than children, although the children who sign in tend to be in the water longer. The pool has always allotted certain time periods specifically limited to adult swimmers, but no such time periods where only children could swim. Fewer and fewer pools allow diving, and the use of diving boards in facilities that do have them is not significant.

Obviously, there are a number of "standards" and studies, but the only standards we must observe are those found in the RCW and WAC (or standards promoted by authorities and organizations those statutes and rules cite). Anything less would be unlawful. I vote on the side of lawful.

Thanks,
Dan!

To: whshed@live.com; dan_serv@hotmail.com; cedars@olypen.com; htrain4@gmail.com; bbwilbur@broadstripe.net; hermitanamarca@gmail.com; jean_salls2000@yahoo.com; gwynstator1@
 Subject: Re: American Red Cross Guideline
 From: cathianne@aol.com
 Date: Thu, 7 Feb 2013 12:52:31 -0500

Ed -

I thought he said in order to install a dual main drain(s) easily, it was be most practical to plumb and raise the level of the pool a few feet. He was explaining the different types of concrete, possible drilling problems, etc., and it sounded like he was thinking of a T-joint/pipe coming out of the main drain, splitting off into two drains, housed and covered up.

Will see what (and why) his recommendations are.
Cathie

-----Original Message-----

From: Ed Delahanty <whshed@live.com>
 To: dan_serv <dan_serv@hotmail.com>; cedars <cedars@olypen.com>; htrain4 <htrain4@gmail.com>; bbwilbur <bbwilbur@broadstripe.net>; hermitanamarca <hermitanamarca@gmail.com>; jean_salls2000 <jean_salls2000@yahoo.com>; cathianne <cathianne@aol.com>; gwynstator1 <gwynstator1@msn.com>; tdahl <tdahl@shorelinefire.com>; suzypalmer1 <suzypalmer1@me.com>
 Sent: Thu, Feb 7, 2013 9:42 am
 Subject: American Red Cross Guideline

Hi All,

I was concerned that decreasing the depth of the deep end of the pool might create a situation that could potentially increase the risk of spinal cord injury in the pool. A little research turned up this recommendation from a New York State Department of Health web site.

Diving Safety Recommendations:

- The American Red Cross recommends a minimum of 9 feet of water depth for head first dives including dives from pool decks.
- Results for a comprehensive study of diving injuries are presented in "Diving Injuries: The Etiology of 486 Case Studies with Recommendations for Needed Action" edited by Dr. Alexander Gabrielsen, Ph.D., 1990, NOVA University Press.¹ A 13 member editorial panel of aquatic experts recommended:
 - Posting of appropriate warning signs which includes prohibition of diving in water depths less than 5 feet.
 - Proper supervision to control activities of swimmers/divers.
 - Public education in swimming and diving.
 - Improved regulations and standards for pool and beaches addressing design and operation issues.

I realize there could be a savings in operating costs if the pool deep end depth was reduced from it's current 10 feet by decreasing the required circulation capacity of the system and reduced sanitary chemical demand with the reduced volume of water.

But, since children and teens are the primary users of the pool and it's likely some of them will dive into the pool - even if it's prohibited - I'd like to suggest we keep the deep end depth at least within the American Red Cross guideline of 9 feet, so there is a designated area for safer diving - off the pool deck - to minimize as much as possible the risk of crippling spinal cord injuries in our pool.

Please consider this issue as options for pool refurbishment are evaluated.

Kind Regards,
Ed.