

<b>Model Aquatic Health Code</b>	Draft Module Review Comment Form
----------------------------------	----------------------------------

The Model Aquatic Health Code (MAHC) Steering Committee and Technical Committees appreciate your willingness to comment on the draft MAHC modules. Comments are due 60 days after the draft module is posted on the MAHC website. Please complete all fields including contact information and provide your detailed comments as completely and succinctly as possible. Please save this form and e-mail to [MAHC@cdc.gov](mailto:MAHC@cdc.gov) with the **Module Name** in the Subject Line. If this is not possible, please send printed copies to:

MAHC Coordinator  
 Waterborne Disease Prevention Branch  
 Division of Foodborne, Waterborne, and Environmental Diseases  
 Centers for Disease Control and Prevention, Mailstop F-22  
 4770 Buford Highway, NE  
 Atlanta, GA 30341

**NOTE:** All comments must be received or postmarked by the submission deadline.

**NOTE:** As part of the MAHC public comment process, all comments as well as reviewer names and affiliations are public information and will be included in the public comment response document to be posted to the MAHC section of the Healthy Swimming website.

<b>Module Name</b>	Facility Design & Construction
<b>Date Submitted</b>	October 10, 2012
<b>First Name</b>	Scot
<b>Last Name</b>	Hunsaker
<b>Organization</b>	Counsilman-Hunsaker
<b>Representing</b>	Counsilman-Hunsaker
<b>Address – Line 1</b>	10733 Sunset Office Drive
<b>Address – Line 2</b>	4 <sup>th</sup> Floor
<b>City</b>	St Louis
<b>State</b>	Missouri
<b>Zip Code</b>	63127
<b>Telephone</b>	(314) 894-1245
<b>Email</b>	scothunsaker@chh2o.com

**Comment Instructions:** Please see reviewing guidance at the front of each module for details about the draft module and submitting comments. **Reminder:** please be as specific, complete and succinct as possible in suggestions for improving this draft module. Use the following form fields to submit one change per line. Comments are helpful but suggested revisions to address the comment will speed the review and posting process. Use additional pages as necessary. Fields will expand to accommodate the text.

1. **Draft MAHC Module Section Number:** Provide specific number (e.g., 6.2.1) of draft MAHC section where a change is needed.
2. **Recommended New Draft MAHC Section Language:** Provide specific amended language.
3. **Basis for Suggested Change:** Are these comments supported by published scientific studies, existing state or local codes, or other references or editorial in nature?
4. **Reference Citation Supporting Suggested Change(s):** Please provide the full reference citation information that supports suggested change(s) including notation of specific page number or section number. Mark *Editorial*, if no reference information is provided

*Copy and Paste Additional Comment Rows as Needed*

<b>Module Section Number</b>	<b>Recommended New Draft MAHC Module Section Language</b>	<b>Basis for Change</b>	<b>Reference Citation</b>
Definitions	<p>“Cracking” means any and all breaks in the structural shell of a pool vessel. <del>Such breaks shall be identified, evaluated, and repaired in a manner that will restore structural integrity and water tightness to the vessel.</del> Cracks exhibiting any of the following qualities should be evaluated by a structural engineer:</p>	<p>Delete “Such breaks shall be identified, evaluated, and repaired in a manner that will restore structural integrity and water tightness to the vessel.” Definitions typically don’t have action</p>	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
		statements.	
Definitions	“Waterslides” means an attraction having a configuration as defined in The Code of Federal Regulations (CFR) Ch. II, Part 1207, or is similar in construction to a playground slide used to allow users to slide from an elevated height to a pool.	This definition is the same as “Pool Slide”. Later in the module, “Waterslide” is defined differently. Verify these two definitions.	
4.2.1.1	AQUATIC FEATURES shall be constructed of reinforced concrete or other impervious and structurally rigid material, which provides a smooth, easily cleaned, watertight structure capable of withstanding the anticipated stresses/loads for full <del>or</del> <b>and</b> empty conditions.	Should be both full and empty conditions.	
4.2.1.2.2	Competitive type POOLS may have lane markings and end wall targets installed in accordance with FINA, NCAA, <b>USA Swimming, NFSHSA</b> , or other recognized standard.	Add USA Swimming and NFSHSA as recognized governing bodies.	
4.2.1.3	POOLS shall be designed in such a way to maintain their capability to retain water.	Grammar	
4.2.1.6.1	If at any time the liner system’s <del>is damaged</del> <b>integrity is compromised</b> or cut, the POOL shall be shut down until the	Damaged can be potentially	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
	system is fully repaired.	interpreted as faded or in other unintended ways.	
4.2.2.1.2	Interior finish materials that become wet due to splashing or uncontrolled condensation shall not support the growth of biological CONTAMINANTS.	Do these exist? Recommend deleting.	
4.2.2.2.1	Natatorium building envelope construction shall include a vapor-retarder/insulation arrangement to assist in the prevention of condensation of water inside building surfaces under the coldest outdoor conditions expected for the location at the design indoor temperature and the highest design indoor relative humidity.	Is it reasonable that these extremes (“coldest outdoor conditions”) be the design points? Typically it based on yearly averages.	
4.2.2.2.2.2	<del>Unless specifically forbidden by the manufacturer, the paint or coating shall be applied in two or more coats.</del>	This is a means and methods direction and does not belong in a code.	
4.2.2.2.3	Where a perforated interior-finish material is used in a natatorium, as for acoustic effects, the perforated material shall not be considered to be a vapor retarder unless it has a listed permeability rating less than 0.1 U.S. perm.	Why is 0.1 perm acceptable here and 0.2 perm is acceptable in 4.2.2.2.2? Recommend consistent rating	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
		in both sections.	
4.2.2.5.4	Natatorium windows shall be glazed to the interior side or be otherwise constructed to minimize the risk of uncontrolled condensation.	Can you “glaze” a window to minimize the risk of condensation? I think this might be bad terminology.	Common types of glazing that are used in architectural applications include clear and tinted <a href="#">float glass</a> , <a href="#">tempered glass</a> , and laminated glass as well as a variety of coated glasses, all of which can be glazed singly or as <a href="#">double, or even triple</a> , glazing units.
4.3.1.1	<b>Where applicable, all</b> equipment used or proposed for use in POOLS governed under the Aquatic Health Code shall be of a proven design and construction and listed by NSF International, Underwriters Laboratories or other accredited standards facility where existing standards apply.	Shouldn’t say “all equipment.” What about starting blocks, lane lines, pool paint?	
4.5.2.3	In water depths 5 foot and greater, the slope of the floors of all POOLS shall not exceed 1 foot (30.5 cm) vertical to 3 feet (91.4 cm) horizontal, except that POOLS designed and used for competitive diving shall be designed to meet the standards of the sanctioning organization (such as NFSHSA, NCAA, <b>USA Diving</b> , or FINA).	Add USA Diving.	
4.5.2.4	POOLS shall be designed so that they drain to <b>drains</b> <del>a common central location</del> without leaving puddles or trapped standing water.	Possible misinterpretation could be that drains need to be	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
		“centrally located” in the mid-point of all pools and not the mid-point of the deep end.	
4.5.2.4.1	<i>If the central location includes main drains, the entire area of the main drains may be level.</i>	Possible misinterpretation could be that drains need to be “centrally located” in all pools.	
4.5.3.3.1	Expansion and/or CONSTRUCTION JOINTS should be <b>only</b> utilized when prudent.	Recommend deleting. This is an engineering driven solution that is dependent on local soil conditions and means and methods.	
4.5.5.4	Traditional rectangular stairs shall have a minimum uniform horizontal tread depth of 12 inches (30.5 cm), and a minimum tread width of 24 (61 cm) inches, <b>with a tolerance of 1/2 inches (1.27 cm) between adjacent risers.</b>	Add tolerance to be consistent with 4.5.5.7.	
4.5.6.4	Stairs wider than 5 feet (1.52 m) shall have at least one additional hand rail for every <b>15 feet</b> <del>10 feet (3.05 m)</del> of stair	There doesn’t appear to be a	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
	width.	basis for the 10 ft spacing requirement and is not addressed in the majority of current standards. Suggest increasing this as a starting point / minimum requirement.	
4.5.7.5	The upper railing surface of grab rails shall extend above the POOL coping or POOL DECK a minimum of 28 inches (71.1 cm).	Table 4.5.6.7 says 27". Should be coordinated.	
4.5.10.3	Trench drains <b>are recommended to shall</b> be extended throughout zero depth entries to facilitate surface skimming.	There is little benefit and high cost to this requirement which is not currently a standard in a lot of jurisdictions. Especially for small skimmer-type wading pools, the cost is disproportionate to the project cost and may not serve any real purpose.	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
		<p>Would this also apply to handicap ramps? It's not defined by the definitions. Suggest replacing "shall" with "recommend."</p>	
4.5.12.1	<p>Floors and walls below the water line shall be white or light pastel in color such that a bather is visible on the POOL floor).</p>	<p>See:4.5.12.1.1</p>	
4.5.12.1.1	<p>The finish shall be at least 9 on the Munsell color value scale.</p>	<p>In our research, of the 50 states only 2 address this item. This will significantly impact waterpark and leisure industry. Recommend a performance standard to visibility if this is required or delete.</p>	
4.5.14.1	<p>Where not otherwise exempted, every POOL shall be provided with hand holds (perimeter gutter system, coping, or cantilevered decking) around the entire perimeter <b>where the water depths is 30 inches or greater and</b> installed not greater than 9 inches (22.9 cm) above, or 3 inches (7.62 cm) below</p>	<p>The State of Illinois is one state that does not require handholds in shallow areas</p>	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
	static water level.	which is fairly logical.	
4.5.15.2	Not more than fifty percent (50%) of the POOL perimeter shall incorporate an INFINITY EDGE detail, unless an adjacent and patron accessible POOL DECK space conforming to MAHC Section 4.8.1 is provided.	<p>This limits the infinity edge to 32 ft in length or have a pool less than 16 ft in width. This would eliminate a significant portion of the infinity pools that have been designed to date. Recommend taking another look at these restrictive requirements.</p> <p>Also, it can be argued that shallow pools could come under different requirements.</p>	
4.5 15.4	Handholds conforming to the requirements of Section <b>4.5.14</b> <del>4.5.6</del> shall be provided for INFINITY EDGES, which may be separate from, or incorporated as part of the INFINITY EDGE	Incorrect reference.	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
	detail.		
4.5 17.1	Where UNDERWATER TOE LEDGES are provided to enable swimmers in deep water to rest, or to provide structural support for an upper wall, they shall be constructed with slip-resistant materials.	Can a ledge stick out from the wall if deep enough?	
4.5 19.1.3	Where depth markings cannot be placed on the vertical wall above the water level, other means shall be used so that the markings will be plainly visible to persons in the pool.	Similar standards are in place in other jurisdictions and they are often useless since the nearest place to post markings could be 30 ft + away from the pool.	
4.5.19.3.1	Depth markers shall be located to indicate water depth to the nearest <del>3 6</del> inches ( <del>7.6 15.2</del> cm), as measured from the POOL floor 3 feet (91.4 cm) out from the POOL wall to the gutter lip, mid-point of surface skimmer(s), or surge weir(s).	This prevents marking depths such as 3'-9". Does one round up to 4'-0" or round down to 3'-6"? There are consequences to both. Recommend modifying language to allow	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
		for markings to be within 3” of measured depth. Then leisure pools and other pools can be accurately marked with depth markers.	
4.6.1.7.1	Windows and any other features providing natural light into the pool space and overhead pool lighting shall be arranged to <b>inhibit</b> <del>avoid</del> glare on the pool surface that would prevent identification of objects on the pool bottom.	“Avoid” is virtually impossible. Suggest changing language to “inhibit.”	
4.8.1.5.2.1	Unobstructed deck area 4 feet (1.22m) minimum in width shall be provided for access around diving equipment, special feature stairways (such as a WATERSLIDE), <b>structural columns</b> , and similar deck equipment.	Add structural columns to the list.	
4.8.1.7.1	An ISLAND not more than 18 inches (45.7 cm) in width shall be designed to <b>discourage</b> <del>prevent</del> a person from walking on the ISLAND <b>by not providing stairs or bridges to the ISLAND.</b>	“Prevent” will be difficult, especially if it’s allowed to be accessed by lifeguard personnel. The result would be barriers that would	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
		likely impact lifeguard observation.	
4.8.2.1.2	If the venue does not have competitive diving, then the diving envelope must conform to the diving envelope standards of Figure <b>4.8.2.2.4.1</b> .	Add figure reference.	
4.8.3.3	Starting platforms shall be installed <b>according to the governing body having jurisdiction or</b> in a minimum water depth of <b>5 feet where no governing body applies</b> 6 feet and 7 inches (2.01 m).	Modify to be consistent with 4.5.1.9.4, and defer to governing bodies per annex and similar to the diving section.	
4.8.6.1.3	<del>BARRIERS shall be provided between CHEMICAL STORAGE/ POOL mechanical spaces and areas accessible to the public, in accordance with local building CODES.</del>	Typically small pools (hotel) typically do not have separate rooms for chemical storage and pool equipment.	
4.9.1.5.4	Valves shall be described as to their function and referenced in the operating instruction manual and wall-mounted piping diagram <del>to be prepared</del> <b>shall be provided</b> .	“to be provided” is awkward. Suggest change.	
4.9.1.8.2.1	<del>A door or doors shall not be installed in a wall between such</del>	This is VERY	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
	<del>equipment rooms and an interior chemical storage space.</del>	common in practice.	
4.9.1.8.3.6	This section shall not be construed as granting relief from section 4.9.1.8.2.1.	Correct typo.	
4.9.1.9.1.1	<p>The access spaces shall be the greater of:</p> <ol style="list-style-type: none"> <li>1) those required by OSHA, NEC, National Fuel Gas Code, or other official requirements; or</li> <li>2) the equipment-manufacturers' recommendations.</li> </ol>	Correct typo.	
4.9.2.1.6	In all rooms in which pool chemicals will be stored, an emergency eyewash station shall be provided. <b>The eyewash station may be provided outside of the chemical room as an alternative.</b> If more stringent requirements are dictated by the AHJ, then those shall govern and be applicable.	The eyewash station should be allowed outside of the chemical room if desired, especially to keep functional and away from harsh chemicals.	
4.9.2.2.3	The floor or deck of the chemical-storage space shall be protected against substantial chemical damage. <del>by the application of a coating or sealant capable of resisting attack by the chemicals to be stored.</del>	Delete "by the application of a coating or sealant capable of resisting attack by the chemicals to be stored."	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
4.9.2.4.4	<del>Where a chemical storage space door must open to an interior space, the door shall not open to a space containing combustion equipment, air handling equipment, or electrical equipment.</del>	This is VERY common in practice.	
4.9.2.4.5.7.1	This alarm shall have a minimum output level of 85 dbA at 10 feet.	I'm not aware of any current jurisdiction where anything close is required in the industry.	
4.9.2.5.2.3	<del>Function of this exhaust system shall be monitored continuously by an audible differential pressure alarm system which shall sound if the specified differential air pressure is not maintained for a period of thirty minutes.</del>	I'm not aware of any current jurisdiction where anything close is required in the industry.	
4.9.2.6.2.2.2	<del>This duct must end at a point on the exterior of the building, at least 20 feet from any air intake for breathing air, cooling air, or combustion air.</del>	I don't believe this to be true. Should read that the intake must be 20 ft from any exhaust duct.	
4.9.2.10.1	Ozone Rooms	Why does ozone require its own room?  Ozone DIN side-	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
		stream needs to be defined.	
4.11.3.3	Deck drains may be either area drains or linear drains. See subsection 4.8.1.2 for deck drain area, spacing, and other requirements.	Should this reference 4.8.1.2 as written or 4.8.1.3? Neither section indicates any requirement for deck drain spacing.	
4.11.6.5	A separation tank shall be provided prior to discharge for backwash water from filters using <b>diatomaceous earth (D.E.)</b> <del>regenerative media</del> , exceptions may be made by local AHJ.	Would like to see a differentiation between DE and perlite so that perlite would not be subject to this requirement as it most often is not currently.	
4.12.1.1	In addition to the general swimming POOL requirements stated in this CODE, SPAS shall comply with the additional provisions <b>or reliefs</b> of this section.	Add “or reliefs” to indicate that this section governs when in conflict with the larger pool code preceding.	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
4.12.1.5.3	<del>Elevated SPAS may be located adjacent to another POOL as long as there is an effective BARRIER between the SPA and the adjacent pool.</del>	This goes against common industry practice to-date.	
4.12.1.5.4	<del>If an effective BARRIER is not provided, a minimum distance of 4 feet (1.22 m) between the POOL and SPA is required.</del>	This goes against common industry practice to-date.	
4.12.2.1.1	In addition to the general AQUATIC FACILITY requirements stated in this CODE, WATERSLIDES and CATCH POOLS shall comply with the additional provisions of this section.	“Waterslide”, using this term in this section relates back to what is the definition of waterslide.	
4.12.2.4.2	<del>Slides shall be perpendicular to the wall of the POOL at the point of exit.</del>	The only requirement should be that the lateral clearances required by the manufacturer are not infringed upon by the pool geometry.	
4.12.2.5.6	If the water slide FLUME shall end in a swimming pool, the landing area shall be divided from the rest of the AQUATIC <del>VENUE FACILITY</del> by a float line or as approved by the Department.	Change “facility” to “venue” for consistency.	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
4.12.2.8.3	There shall be a slide landing area in accordance with the slide manufacturer's recommendations.	Why would an exemption be made for drop slides? The annex does not explain. There is liability and risk to not following manufacturer's recommendations.	
4.12.5.2.4	A deck shall be provided along the entire length of the LEISURE RIVER.	This requirement is not typical in many states. It should be made clear that an interior island that can be utilized for lifeguarding purposes as defined in the code shall suffice.	
4.12.7.3	<p><del>The BULKHEAD shall be designed, installed and operated so that either</del></p> <p>1) <del>The BULKHEAD extends down to the POOL floor and openings between the BULKHEAD and POOL floor and walls is at least 3 inches (7.62 cm) but not greater than 5 inches (12.7 cm), or</del></p>	This is not the current industry standard. Is there science or data to suggest that there is currently an issue that should	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
	2) <del>There is at least 4 feet (1.22 m) of clearance between the bottom of the BULKHEAD and the POOL floor and openings between the BULKHEAD and POOL walls is at least 3 inches (7.62 cm) but not greater than 5 inches (12.7 cm).</del>	be addressed here? None that I'm aware of or addressed in the annex.	
4.12.7.4	<del>A line of contrasting color at least 4 inches (10.2 cm) wide shall mark the bottom edge of the BULKHEAD.</del>	This is not typical and I don't understand the purpose / benefit.	
4.5.5.3 (ANNEX)	It is common, especially in high-end diving wells with 10-meter towers, for there to be "swim-out" stairs underneath the dive tower. This provision is allowing for those types of deep water stairs without requiring the stairs to continue down to the bottom of the pool (which <del>may would</del> be 17 feet <b>deep</b> and impractical in the diving well example).	Verbiage clarification suggestions.	
4.5.19.4 (ANNEX)	The vast majority of current standards allow for diving off the side of the pool in water 5 feet (1.5 m) deep. Standards also allow diving off of starting blocks at 6 feet and 7 inches (2 m) (or even 4 feet (1.22 m) by some regulations as allowed by some governing bodies and permitted by this module's draft) and mandate 8 feet (2.44 m) off the pool deck. Water depths of at least 5 feet (1.5 m) are generally considered as safe for diving from the edge of a pool where the coping/deck is the typical 6 inches (15.24 cm) above the water surface. Starting platforms are located 18 inches (45.72 cm) to 30 inches (76.2 cm) above the waterline, with most at 29.5 inches (74.93 cm). Case	"Case histories reveal that there are extremely few starting platform injuries to competitive swimmers where the water depth is deeper than 5 feet (1.5 m)." If this is the "science" and	

<b>Module Section Number</b>	<b>Recommended New Draft MAHC Module Section Language</b>	<b>Basis for Change</b>	<b>Reference Citation</b>
	<p>histories reveal that there are extremely few starting platform injuries to competitive swimmers where the water depth is deeper than 5 feet (1.5 m). Because of this, 5 feet has developed into the litigation line for starting platform injury cases. If 5 feet is considered a safe water depth for a platform that is 18 inches or more above the water surface, then 5 feet should also be safe for diving from the side of a pool with 6 inches above the water surface. The main caveat remains that a person must be trained to use a shallow entry dive.</p> <p>The American Red Cross recommends 9 feet (2.74 m) of water depth based on analyses of spinal cord injuries<sup>1</sup>. The organization has clarified this recommendation to state “Be sure water is at least nine-foot deep unless performed with proper supervision and in water depths that conform with the rules of the concerned regulating body, such as USA Swimming, the National Collegiate Athletic Association (NCAA), the Amateur Athletic Union (AAU), the National Federation of State High School Associations (NFHS), YMCA of the USA and the international swimming federation (FINA).”</p> <p>In a summary of 194 neck injuries from deck level dives into in-ground pools, 86.6% where in water less than or equal to 4 ft; 99.0% were in water less than or equal to 5 feet (1.5 m). Only 1 injury occurred in water between 6 and 7 feet<sup>2</sup>—this supports keeping a diving depth of 5 feet at this time. The same study investigated 74 neck injuries occurring with use of springboards and jumpboards. Of these injuries, 12.2% occurred in water less than or equal to 4 feet; 66.2% occurred in water less than or</p>	<p>5 feet is also the most conventional practice in the industry, why is the bar being raised to 6’-7” arbitrarily without the science to substantiate a significant improvement in safety?</p>	

<b>Module Section Number</b>	<b>Recommended New Draft MAHC Module Section Language</b>	<b>Basis for Change</b>	<b>Reference Citation</b>
	<p>equal to 5 feet,; 94.6% occurred in water less than or equal to 6 feet all injuries occurred in water of 7 feet or less. These data support increased the diving depth under diving boards or starting blocks because of the increased height before entry and associated increased body velocity.</p> <p>Another study showed that 89% of diving-associated neck injuries occurred in water less than 5 feet.</p>		
4.8.1.4.3 (ANNEX)	<p>Carpet and artificial turf have been found to be inappropriate finish materials for the wettest area immediately around the pool, i.e. perimeter deck. Although the materials that carpet is manufactured from are durable and do not support mold growth, when they are installed over a relatively impermeable surface, water flows very slowly through the carpet. Soil and contaminants entering into the carpet are not easily removed. Since the carpet stays wet longer, and soil and contaminants remain in the carpet mold and algae growth is observed. Therefore carpeting is not an acceptable finish material in the wet perimeter deck.</p> <p>Finish materials for the perimeter deck should not block deck drains or impair water flowing to deck drains.</p> <p>Carpeting can be installed beyond the deck drains, i.e. dry deck.</p>	How would rubber surfaces typically found on splashpads or spraygrounds and their perimeters be viewed under this section? I suggest it gets examined by the committee and addressed in this section.	
4.8.3.1 (ANNEX)	The intent is to require 6 feet 7 inches (2 m) water depth unless there is a governing body (e.g. FINA, USA Swimming, NCAA, NFSHSA, etc.) that is applicable. FINA and NCAA allow 4 feet	The recommended Olympic competition depth	

<b>Module Section Number</b>	<b>Recommended New Draft MAHC Module Section Language</b>	<b>Basis for Change</b>	<b>Reference Citation</b>
	<p>(1.22 m) at starting platforms. As is well documented in case histories and litigation, this depth is unsafe for high school age beginners. Five feet (1.52 m) is on the edge of safety for a high school age male to make a starting error. The most conservative and safest starting depth is 6 feet 7 inches or 2-meters. This is consistent with the recommended minimum starting depth for Olympic competition.</p>	<p>of 6’-7” is not for safety purposes, rather for “fast water”. FINA supports starting blocks for the majority of their facilities under 5 feet of water depth.</p>	
<p>4.8.7.8 (ANNEX)</p>	<p>The power cord length needs to be shorter than the distance between the receptacle and the edge of the pool in order to prevent the power supply from accidentally entering the pool water while connected.</p>	<p>If this is current industry or NEC standard, then I’m unaware of it. If not, are there documented cases where this has been an issue? Would we be infringing upon the regulatory scope of the NEC? This could also be difficult to achieve and/or costly for many facilities since the solution would be different for each pool.</p>	

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
4.9.1.8.3.1 (ANNEX)	<p>Where a door or doors must be installed in a wall between an equipment room and a natatorium, the floor of the equipment room should slope back into the equipment room in such a way as to prevent any equipment-room spills from running under the door into the natatorium. Exceptions may include:</p> <ol style="list-style-type: none"> <li>1) This may be met by a floor all of which is at least four inches below the level of the nearest part of the natatorium floor.</li> <li>2) This may be met by a continuous dyke not less than four inches high located entirely within the equipment room, which will prevent spills from reaching the natatorium floor.</li> </ol> <p><i>Note: Equipment-room floor drains may be required.</i></p> <p>Even if pool chemicals and cleaning supplies are not in the equipment room, there is a very good chance that other fluids may be, e.g. ethylene-glycol heating fluids, petroleum refrigeration oils, polyol-ester refrigeration oils, alkyl-benzene refrigeration oils, other lubricants, caustic or acidic coil cleaners, etc.</p>	This may be viewed by authorities as either a safety hazard and/or an ADA issue.	
4.9.2.5.2.3 (ANNEX)	Function of this exhaust system should be monitored continuously by an audible differential-pressure alarm system which should sound if the specified differential air pressure is not maintained for a period of thirty minutes.	I disagree with this requirement. This is not industry standard now, at least as far as I'm aware.	

<b>Module Section Number</b>	<b>Recommended New Draft MAHC Module Section Language</b>	<b>Basis for Change</b>	<b>Reference Citation</b>
		<p>And unless there is substantial case documentation for making this change in the industry or from ASHRAE, then I believe this requirement should be removed.</p>	