



Driven by your expertise.

Summary of TRC Call Agenda for 7/27/20

The following is a summary of phone-based discussions for Change Requests (CRs) addressed by the Technical Review Committee (TRC) for the week of 7/20/2020. A link the recording of the call can be viewed at the CMAHC's Youtube channel by visiting our website at <https://cmahc.org/technical-review-committee.php>.

Members Present: James Amburgey, Kevin Boyer, Michele Hlavsa, Vince Hill (for Joe Laco), Jodi Jensen, Cindy Marshall, Ellen Meyer, Tina Moore, Chris Nelson, Jason Schallock, Joe Stefanyak, Amanda Tarrier

Members Absent: Miklos Valdez

4.7.3.2.2.1-0001: This CR proposes to include sizing for the feeders supplying pH adjustment chemicals in addition to those for disinfectant. The CR agreed that there is currently no requirement that chemical feeders for pH adjustment be sized so that the required pH levels in the MAHC can be maintained. There was some discussion that this may be better in section 4.7.3.2.7 on feeders for pH adjustment, but the TRC felt it was also ok in the section proposed. The TRC did propose a slight modification, so that the section would read "required disinfection and pH levels at all times in accordance with the MAHC" instead of "Feeders shall be capable of supplying DISINFECTANT and pH control chemicals to the AQUATIC VENUE to maintain the minimum required DISINFECTION levels at all times and pH in accordance with the MAHC." The TRC unanimously recommended a Yes vote on the revised CR language.

4.7.3.2.2.2-0001: This CR proposes to delete the MAHC section which reads: "All CHLORINE dosing and generating equipment including erosion feeders, or in line electrolytic and brine/batch generators, shall be designed with a capacity to meet the demand necessary to maintain the minimum required FREE AVAILABLE CHLORINE (FAC) concentrations specified in MAHC 5.7.3.1.1.2 during all times of operation." The TRC discussed that during the last change request cycle, when the chlorine demand factors were added to the MAHC in lieu of a prescriptive sizing calculation, there was going to be annex information added with a model for using the chlorine demand factors to calculate needed capacity. This was never done, but the TRC felt it should be in the future. The TRC also felt that deleting this section would leave the MAHC without any requirements for chlorine feeder/generation equipment sizing. The TRC unanimously recommended a No vote on this CR.

4.7.3.2.2.1-0001: This CR proposes deletion of the chlorine demand factors section that follows the section proposed to be deleted in CR 4.7.3.2.2-0001. It proposes to delete “Sizing of CHLORINE dosing and generating equipment shall be based on the following CHLORINE demand factors: 1) AQUATIC VENUE surface area; 2) AQUATIC VENUE volume; 3) AQUATIC VENUE type of use/space: a. FLAT WATER; b. AGITATED WATER; c. HOT WATER; 4) AQUATIC VENUE type, for example: POOL, SPA, WADING POOL, WAVE POOL (wave time), WATERSLIDE, INTERACTIVE WATER PLAY VENUE, THERAPY POOL; 5) Indoor or outdoor including maximum hours of sunlight/UV exposure; 6) Anticipated maximum water temperature; 7) Anticipated maximum number of BATHERS per day; 8) Cyanuric acid/stabilizer used; 9) Anticipated atypical water loss; and 10) Anticipated exposure to vegetation and airborne debris.” The TRC unanimously recommended a No vote on this CR, with the same rationale as with CR 4.7.3.2.2-0001.

4.7.3.2.2.3.1-0001: This CR proposes to delete the reference to chlorine demand factors from the documentation section “, and 2) a discussion of the analysis and use of the CHLORINE demand factors listed in MAHC 4.7.3.2.2.1 in sizing the feeders/equipment.” The TRC unanimously recommended a No vote on this CR, with the same rationale as with CRs 4.7.3.2.2-0001 and 4.7.3.2.2.1-0001.

4.7.3.2.2.4-0001: This CR proposes to change the section requiring additional disinfectant feed capacity in the following manner: “If upon operation it is determined that feeders/equipment are not capable of meeting the demand necessary to maintain minimum required DISINFECTION levels at all times, the aquatic venue must remain closed until the design professional submits modifications to their original design for approval and additional feed capacity is installed and inspected ~~additional capacity shall be provided.~~” The TRC discussed that design professionals are not always involved in this type of modification, this is a design section item not operational section, and that the MAHC already requires immediate correction or closure if the minimum disinfection residual is not met. The TRC unanimously recommended a No vote on this CR.

4.5.16.5-0001: This CR proposes the following additional design requirements for hydrotherapy jets: **Hydrotherapy Jets** The design of hydrotherapy jets at underwater benches in pools shall ensure that: 1. Air entrained by the hydrotherapy jets does not obscure visibility into the pool in the vicinity of the jets, 2. Velocity of hydrotherapy jet does not provide enough force to push a toddler from the surface of the bench, 3. The arrangement of the hydrotherapy jets do not induce a current in the pool. The CR champion reported that the TSC disagreed with the CR and that these are good ideas but need to be better defined, for example, having water flow into the pool via inlets and out via outlets will always create some degree of current. The TRC agreed and unanimously recommended a No vote on this CR.

4.7.5.3.1-0001: This CR would require that the hydrotherapy jet system be independent of the recirculation, filtration, and heating systems. The CR champion noted that the TSC consulted recommended a yes vote on this CR. The TRC agreed and unanimously recommended a Yes vote on this CR.

3.2-0035: This CR would add to the definition of qualified lifeguard that specific courses were accepted as noted in section 6.2.1. The TRC had addressed this CR on the 4/27 email agenda and did not reach consensus; however, they voted no to each of the proposed additions of specific courses in section 6.2.1. The TRC discussed that this is not within the scope of the MAHC, and reached consensus to recommend a No vote on this CR.

3.2-0036: This CR would add to the definition of qualified operator that specific courses were accepted as noted in section 6.1.1.1. The TRC had addressed this CR on the 4/27 email agenda and did not reach consensus; however, they voted no to one of the proposed additions of specific courses in section 6.1.1.1 and did not reach consensus on the other. The TRC discussed that even though naming specific courses would be a benefit to AHJs who do course review themselves, it is not within the scope of the MAHC, and the CMAHC certification process is a similar avenue to have a course certified for meeting the MAHC requirements. The TRC reached consensus to recommend a No vote on this CR.

6.1.1.1-0001 and 6.1.1.1-0002: These two CRs were for addition of specific pool operator courses as accepted. Consistent with their discussion on CR 3.2-0036, the TRC maintained its recommended No vote on CR 6.1.1.1-0002 and reached consensus for a No vote on CR 6.1.1.1-0001.

5.12.10.5.1.1-0001: This CR was originally addressed on the 4/27 email agenda, where the TRC recommended a Yes vote; however it was flagged to revisit. The TRC was concerned that the about the implications of using “and” instead of “or” proposed change to the section: “Repairs or alterations to electrical equipment and associated equipment shall preserve compliance with the NEC, and all applicable federal, state, or local laws, rules, regulations, or ordinances ~~or with applicable local CODES prevailing at the time of construction, or with subsequent versions of those CODES.~~” The CR champion will reach out to the CR submitter to determine if “and” could be changed to “or”. The TRC would maintain their recommended Yes vote on this CR if the change was accepted by the submitter.

6.4.1.4.3-0001: This CR had a recommended no vote by the TRC when addressed on the 4/27 email agenda; however it was flagged to revisit. The CR proposes to add the following to the incident reporting section: “A failure to report incidents as required can lead to a formal enforcement action such as an order to close or the revocation of the operating permit.” The TRC felt that this should be left up to the AHJ as to how to handle, and that MAHC sections 6.6.4 and 6.6.5 already address enforcement of violations. The TRC decided to maintain its recommended No vote on this CR.

4.2.2.2.2-0001: This CR proposes to remove the requirement that paints or coatings serving as a vapor retarder meet the requirements of UL 2818-2013 through testing of products to CDPH/EHLB/Standard Method v1.1 or UL 2818-2013. This CR was previously addressed on the 5/4 email agenda; however the

TRC was unable to reach consensus, so it was flagged to revisit. The TRC discussed that this would be difficult for an AHJ to assess, and that it was more of a green building standard; other members felt that the intent to limit VOCs as discussed in the Annex was appropriate health and safety rationale for the requirement. The TRC was evenly split on its recommended vote, so they will continue to Abstain from this CR.

4.2.2.2.2-0002: This CR appears to be a duplicate of CR 4.2.2.2.2-0001. As such, the TRC also Abstains from a vote on this CR due to the inability to reach consensus.

4.5.10.2-0002: This CR proposes to remove the requirement that pool lifts be CERTIFIED, LISTED, AND LABELED in accordance with UL 60335-2-1000, and be installed and used in accordance with the manufacturer's installation instructions and ICC/ANSI A117.1. This CR was previously addressed on the 5/4 email agenda; however the TRC was unable to reach consensus, so it was flagged to revisit. The TRC discussed that this was a relatively easy thing to check for, and was important for electrical safety. The TRC reached consensus and recommended a No vote on this CR.

4.6.4.4.1-0002: This CR proposes to remove the requirement that carbon monoxide detectors be CERTIFIED, LISTED, AND LABELED in accordance with UL 2075. This CR was previously addressed on the 5/4 email agenda; however the TRC was unable to reach consensus, so it was flagged to revisit. The TRC discussed that this was a relatively easy thing to check for, and was important for safety. The TRC reached consensus and recommended a No vote on this CR.

4.6.7.1-0001: This CR proposes to remove the requirement that drinking fountains be certified, listed and labeled to UL 399. This CR was previously addressed on the 5/4 email agenda; however the TRC was unable to reach consensus, so it was flagged to revisit. The TRC discussed that this is an electrical standard, and that it would in effect preclude non-electric drinking fountains (for example, those without chiller units). For this reason the TRC reached consensus and recommended a Yes vote on this CR.

4.7.3.2.6.6-0002: This CR proposes to remove the requirement that chlorine generator units be CERTIFIED, LISTED, AND LABELED to UL 1081 (for electrical/fire/shock SAFETY) by an ANSI-accredited certification organization. This CR was previously addressed on the 5/4 email agenda; however the TRC was unable to reach consensus, so it was flagged to revisit. The TRC discussed that this was a relatively easy thing to check for, and was important for electrical safety. The TRC reached consensus and recommended a No vote on this CR.

3.2-0002: This CR proposes changes to the definition of aquatic venue enclosure as follows: "Aquatic Venue Enclosure" means an uninterrupted constructed feature or obstacle barrier surrounding and

securing an aquatic venue. It was previously addressed on the 5/11 email agenda, with a recommended yes vote by the TRC; however it was flagged to revisit. The TRC was unsure why this was flagged to revisit and decided to maintain their recommended Yes vote on this CR.

3.2-0007: This CR proposes to remove most of the explanation from the breakpoint chlorination definition. It was previously addressed on the 5/11 email agenda, with a recommended yes vote by the TRC; however it was flagged to revisit. TRC members felt that the text could go to the Annex, and that it did add length to the code; however it was questioned if it would be useful to users if only in the Annex and that it serves as an important educational piece. The MAHC could be made more concise in the future without losing valuable context. The TRC reached consensus for a No vote on this CR.

3.2-0024: This CR was deferred to a call from the 5/11 email agenda. It proposes to revise the definition of substantial alteration as follows: “Substantial Alteration” means the alteration, modification, or renovation of regulated aspects of an aquatic venue (for outdoor aquatic facilities) or indoor aquatic facility (for indoor aquatic facilities) ~~where the total cost of the work exceeds 50% of the replacement cost of the aquatic venue (for outdoor aquatic facilities) or indoor aquatic facility (for indoor aquatic facilities).~~ The TRC felt that the existing definition was appropriate and recommended a No vote on this CR.

5.2.2-0001: This CR proposes to delete the exemptions section in the MAHC. It was previously part of the 5/11 email agenda but the TRC was unable to reach consensus so it was flagged to revisit. The TRC felt that it was not appropriate to delete this section because it is important to have a record of exemptions given and the reasons why code requirements would not apply to a specific operation. The TRC recommended a No vote on this CR.

5.4.1.1.2-0001: This CR proposes to change “barrier” to “enclosure” throughout the section about aquatic venues without a barrier and other parts of the aquatic facility are open to the public. It was previously part of the 5/11 email agenda, and the TRC recommended a Yes vote, however it was flagged to revisit. The TRC discussed whether the intent of this section was for a barrier and not an enclosure. The TRC decided to maintain its recommendation of a Yes vote on this CR, which two TRC members recommending a No vote.

6.6.1.1-0001: This CR proposes to add a requirement that AHJ inspections occur a minimum of annually. It was previously part of the 5/11 email agenda but the TRC was unable to reach consensus so it was flagged to revisit. The TRC discussed that it was determined when the MAHC was being developed that it was not intended to tell AHJs what to do. Therefore, prescribing an inspection frequency does not belong in the MAHC, and the TRC reached consensus and recommended a No vote on this CR.

6.6.4-0001: This CR proposes to add the following to the enforcement section “If the AHJ determines that any provision of the MAHC have been or are being violated, the AHJ may withhold or revoke the operating permit of an aquatic venue, or the AHJ may order that an aquatic venue be closed until corrective action has been completed. For imminent public health hazards requiring immediate closure per 6.6.3.1, the aquatic venue must remain closed until corrected as verified by an followup inspection or until appealed. For other violations a notice of intended action shall be delivered noting the date the action will become final and informing the owner of the right to appeal the decision.” It was originally part of the 5/11 email agenda but deferred to a call. The TRC felt that enforcement of violations that are not imminent health hazards is already addressed in section 6.6.5 and recommended a No vote on this CR.

6.6.4.1-0001: This CR changes the language in the section regarding placarding a facility from active to passive and also requires that the AHJ be the one to placard the facility. It was previously part of the 5/11 email agenda but the TRC was unable to reach consensus so it was flagged to revisit. The TRC felt that this was not in the intent of the MAHC to prescribe that the AHJ do this and that the existing wording was appropriate. The TRC reached consensus and recommended a No vote on this CR.

6.6.4.2-0001: This CR proposes to change the section on placarding as follows: “When a placard is used, by the AHJ or voluntarily used by the AQUATIC FACILITY owner, QUALIFIED OPERATOR, or RESPONSIBLE SUPERVISOR it shall be conspicuously posted at each entrance leading to the AQUATIC VENUE.” It was previously part of the 5/11 email agenda but the TRC was unable to reach consensus so it was flagged to revisit. The TRC felt that this addition was unnecessary and reached consensus to recommend a No vote on this CR.

6.6.4.3-0001: This CR proposes the following changes to the section on requesting a hearing: “Within 15 days of the AHJ placarding an AQUATIC FACILITY, the operator of such AQUATIC FACILITY may request a hearing to ~~shall be provided with an opportunity to be heard and~~ present proof that continued operation of the facility does not constitute a danger to the public health.” It was previously part of the 5/11 email agenda but the TRC was unable to reach consensus so it was flagged to revisit. The TRC felt that this was an unnecessary change and also used “may” and not “shall” which would make it unenforceable. The TRC reached consensus to recommend a No vote on this CR.

6.6.5-0001: This CR proposes to add the following statement to the enforcement penalties section: “Civil and criminal penalties shall be in accordance with the applicable provisions of state law.” It was originally part of the 5/11 email agenda but deferred to a call. The TRC felt that discussion of criminal penalties in particular was outside the scope of the MAHC and that this would all be determined by the AHJ. The TRC recommended a No vote on this CR.

6.6.5.1.2-0001: This CR proposes to delete the statement “6.6.5.1.2 Civil Penalty For each such offense, violators shall be liable for a potential civil penalty.” with the rationale that there may be criminal

penalties. It was originally part of the 5/11 email agenda but deferred to a call. The TRC felt that criminal penalties were not within the scope of the MAHC and that the language should be kept in. The TRC recommended a No vote on this CR.

6.6.5.3-0001: This CR proposes to make the following changes to the section on falsified documents: Falsifying or presenting to the AHJ falsified documentation and or certificates shall be a civil or criminal violation in accordance with state code ~~as specified by the AHJ~~. It was originally part of the 5/11 email agenda but deferred to a call. The TRC felt that criminal penalties were not within the scope of the MAHC and that the language should be kept as is. The TRC recommended a No vote on this CR.

6.6.5.4-0001: This CR proposes to delete the following section with the rationale that there may be criminal penalties: "Upon determining that one or more violations of this CODE exists, the AHJ shall cause a written notice of the violation or violations to be delivered to the owner or operator of the AQUATIC FACILITY that is in violation of this CODE." It was originally part of the 5/11 email agenda but deferred to a call. The TRC felt that criminal penalties were not within the scope of the MAHC and that the language should be kept in, as it protects both the operator and AHJ by requiring formal documentation of the violation. The TRC recommended a No vote on this CR.

4.8.6.1.1.1-0001: This CR proposes to change a section title from barriers to enclosures because enclosures are specified in the language in the section. It was originally addressed on the 5/11 email agenda, and the TRC recommended a yes vote, but it was flagged to revisit. The TRC was unsure why it was flagged to revisit as it is a straightforward CR, and continues to recommend a Yes vote on this CR.

4.8.6.2.2.2-0001: This CR proposes to change barriers to enclosures in the following section: "Exit pathways shall be separated with an ENCLOSURE ~~a BARRIER~~ from AQUATIC VENUES not in operation." The TRC previously addressed this CR as part of the 5/11 email agenda, but they were unable to reach consensus and the CR was flagged to revisit. The TRC questioned if the intent in this section truly was a barrier, and discussed that although this is for new construction it could impact aquatic facilities with adjacent indoor and outdoor aquatic venues. After discussion, the TRC was still unable to reach consensus, so they will Abstain from a voting recommendation for this CR.

4.8.6.3.2-0001: This CR proposes to change barrier to enclosure in the following section: "Gates shall be at least equal in height at top and bottom to the ENCLOSURE ~~BARRIER~~ of which they are a component." It was originally addressed on the 5/11 email agenda, and the TRC recommended a yes vote, but it was flagged to revisit. The TRC discussed that although some fences would be considered barriers not enclosures if they didn't meet the enclosure requirements of the MAHC, the intent of this section was for gates of an enclosure. The TRC continues to recommend a Yes vote on this CR.

4.6.7.1.1-0001: This CR was deferred from the 5/4 email agenda. It proposes to remove the following from the section on drinking fountains: Alternate locations or the use of bottled water shall be evaluated by the AHJ. The TRC felt that bottled water should remain an option that can be considered by the AHJ, and the AHJ could always stipulate if allowing the facility to use in lieu of a drinking fountain that it must be provided free of charge. The TRC recommended a No vote on this CR.

4.6.7.5-0001: This CR was deferred from the 5/4 email agenda. It proposes to change the section of water supply for a drinking fountain in the following manner: The drinking fountain shall be supplied with water from a public water system ~~an approved potable water supply.~~ The TRC felt that there are potable water supplies that do not always meet the definition of a public water system, but are subject to AHJ approval. The TRC felt the language should remain as is and recommended a No vote on this CR.

4.12.3.3.4-0001: This CR proposes to change barrier to enclosure in the section on caisson barriers for wave pools. It was originally addressed on the 5/11 email agenda, and the TRC recommended a yes vote, but it was flagged to revisit. A member confirmed that these are enclosures, not barriers, and that the CR made sense. The TRC continues to recommend a Yes vote on this CR.

The TRC was unable to address the remainder of the CRs on the agenda; they will be moved to the August 3rd TRC call.