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Summary of TRC Call Agenda for 6/2

The following is a summary of phone-based discussions for Change Requests (CRs) addressed by the Technical Review Committee (TRC) for the week of 6/2/2020. 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>.

4.7.5.3-0001: The TRC had discussed this CR via email in the week prior. Before voting, one member had a comment about return inlets in stairwells, and there was concern that as worded the CR would create a requirement that a minimum of two inlets be located under the underwater bench, but then any number of additional inlets could be installed in other locations. This would not be consistent with the intent of the proposed CR. The TRC recommended including a separate requirement that inlets in the location of underwater benches be located below the bench. The CR champion was able to check with the CR submitter during the call, and the submitter agreed to the modified language. The TRC then voted unanimously to recommend a "Yes" vote on this CR as modified by the TRC. *(Kevin, could you provide the modified language?)*

Interactive Water Play Venue Design Ad Hoc Committee CRs:

4.7.3.3.2.2-0002: This CR proposes language that would require interactive water play venues to have the required secondary disinfection system (UV or ozone) be located after the feature pump to treat 100% of the water prior to reaching the patrons. The TRC discussed this CR mainly with respect to UV. The CR had a lengthy discussion about requiring this as the sole alternative, especially in light of the fact that the MAHC requirements secondary disinfection system design are based on the ability of the system to reduce the Crypto level to less than an infective dose overnight, but it was decided that with the small volume of spray grounds and the fact that the water is directly sprayed on patrons that this option was the best for protecting public health and reducing the potential for transmission of recreational water illnesses. With this option, the 3-log Crypto reduction would be achieved prior to the water being resprayed on the patrons. The TRC unanimously recommended a "Yes" vote on this CR, with the abstention of a TRC member who was on the Interactive Water Play Venue Design Ad Hoc Committee.

4.7.3.3.3-0001: This CR proposes to require UV equipment on interactive water play aquatic venues to be located after the feature pump, to treat 100% of the water prior to reaching the patrons. It also requires that when the features are off, the UV would have to continue to circulate a minimum amount of water back through the tank if required by the manufacturer for warm-up and cool-down purposes. The TRC agreed to the location of the UV installation similar to the previous CR, and felt that continuing to circulate water as necessary for warm up and cool down periods was also sensible. The TRC unanimously recommended a “Yes” vote on this CR, with the abstention of a TRC member who was on the Interactive Water Play Venue Design Ad Hoc Committee.

4.7.3.3.11-0001: This CR proposed to add a section that would require UV equipment to be tested and certified per NSF 50 Section 15.9 to provide a chloramine reduction so that the chloramines when measured are no greater than 0.4 ppm. The TRC discussed that this CR as written would essentially require all UV equipment to be tested to this standard, and that the intent of requiring secondary disinfection in the MAHC is for pathogen removal (specifically Crypto). From an operational standpoint, there are various means to reduce chloramines, and the MAHC already requires the operator to take action to reduce combined chlorine levels when they are greater than 0.4 ppm. The TRC discussed that although medium pressure UV lamps are polychromatic and would probably have the proper wavelengths for both Crypto removal and to destroy chloramines, this requirement would effectively the option of using low pressure lamps. Finally, if the intent was to require UV systems when used for chloramine reduction to meet a specific standard to ensure performance, then a CR could be submitted for that in a future change request cycle. The TRC unanimously recommended a “No” vote on this CR with the abstention of a TRC member who was on the Interactive Water Play Venue Design Ad Hoc Committee.

4.12.8.4.3-0001: This CR would add a section to require spray pads to have valving in the drain system to allow for discharging spray pad water to an approved means for waste water disposal prior to returning to the treatment tank when the spray ground is not in use. The TRC agreed that this was a sensible requirement that would help prevent contamination of the collection tank. It was noted for these and subsequent CRs that in the proposed language “treatment tank” should be changed to “collection tank” to be consistent with the terminology used in 4.12.8. The TRC recommended a “Yes” vote on this CR with one member disagreeing and the abstention of a TRC member who was on the Interactive Water Play Venue Design Ad Hoc Committee.

4.12.8.6.3-0001: This CR would add a requirement that interactive water play venue treatment tanks have a minimum operational volume of 3,000 gallons. The TRC discussed what the general volume for these aquatic venues was to determine how much of an impact there would be for future construction, and also found the science behind the 3,000 gallon size to be logical. One TRC member noted that in Utah the minimum size is 1,000 gallons but they are considering a larger minimum since venues that small often have issues with combined chlorine and other water quality and maintenance issues. The TRC unanimously recommended a “Yes” vote on this CR, with the modification of “treatment tank” to “collection tank” for consistency with the terminology used throughout section 4.12.8. One TRC member abstained from the vote as he was on the Interactive Water Play Venue Design Ad Hoc Committee which submitted the CR.

4.12.8.6.3.1-0001: This CR would add a requirement that the volume of water in the treatment tank be sufficient to assure continuous operation of the filtration system. The TRC felt this CR made sense as it would prevent future operational issues such as pump cavitation. The TRC unanimously recommended a “Yes” vote on this CR, with the modification of “treatment tank” to “collection tank” for consistency with the terminology used throughout section 4.12.8. One TRC member abstained from the vote as he was on the Interactive Water Play Venue Design Ad Hoc Committee which submitted the CR.

4.12.8.6.4-0001: This CR would add a requirement that an overflow pipe be provided on interactive water play venues to convey excess water (waste) to an approved local source through a suitable air gap. The TRC was generally in favor of this type of requirement but were concerned that as written it would eliminate other viable options to prevent overflow, such as sump pumps. The TRC recommended asking the Ad Hoc committee to modify the language be more general as to the expected result and include language along the lines of “including but not limited to” to include an overflow pipe and sump pump. The TRC will revisit the CR and vote on the modified language on the 6/22 call.

4.12.8.6.5-0001: This CR would add a requirement for interactive water play venues that recirculation inlets be sized and positioned to provide for complete mixing of the tank. The TRC agreed with this CR and unanimously recommended a “Yes” vote. One TRC member abstained from the vote as he was on the Interactive Water Play Venue Design Ad Hoc Committee which submitted the CR.

4.12.8.6.6-0001: This CR would add a requirement that the interactive water play venue have a screen or similar device through which all water from the spray pad passes before entering the treatment tank or another method to provide for removal of debris on the surface layer of the

treatment tank water. TRC members were concerned about the ability to clean and maintain the screen depending on its location (accessibility) and the fact that there was no proposed operational requirement to do so. In addition, the second option only addresses materials which float on the surface of the water, and not settled materials. The TRC was also concerned about the potential impact of a screen or other similar device on the impact on flow rate. It was noted that the drain requirement is for grate openings no greater than 0.5 inches. The TRC unanimously recommended a “No” vote on this CR; one TRC member abstained from the vote as he was on the Interactive Water Play Venue Design Ad Hoc Committee which submitted the CR.

4.12.8.13-0002: This CR would add an annex section with recommendations for foot showers at interactive water play venues. The TRC agreed that this would be a good recommendation to have in the Annex, but noted that the corresponding code section concerns electrical requirements at interactive water play venues. They recommended that the Annex section be moved to 4.12.8. The TRC unanimously recommended a “Yes” vote on this CR with relocation of the Annex addition to 4.12.8. One TRC member abstained from the vote as he was on the Interactive Water Play Venue Design Ad Hoc Committee which submitted the CR.

The remainder of the CRs on the agenda will be discussed over email or moved to future calls, as indicated on the attached updated CR agenda and CR list.