

Swimming Pool Code Committee Minutes
West Wisconsin Technical College
1000 College Avenue
Mauston, WI 53948
January 13, 2011

Committee Members in Attendance:

Bob Wiess, WACO Member, Wilderness Campground in Montello
David Sawvell, Agent Health Inspector, La Crosse County Health Department
Doug Henry, WHLA Member, Best Western Quiet House & Suites in Dodgeville
Doug Severson, State Health Inspector, DHS Southern Regional Office
Glen Jones, Public Swimming Pool Consultant/Plan Reviewer, DOC
Jerry Chilinski, Agent Health Inspector, Milwaukee Department of Neighborhood Services
Jim Kaplanek, Section Chief, DHS Central Office
Mary Ellen Bruesch, State Health Inspector, DHS Southeast Regional Office
Mike Nelson, Construction Manager, Neuman Pools Inc.
Peter Simon, Sales and Project Development, Neuman Pools Inc.
Sara Brown, Agent Health Inspector, Marathon County Health Department
Shane Sanderson, Recreational Waters Program Manager, DHS Central Office
Steve Matzl, WHLA Member, Kalahari Resorts in Wisconsin Dells
Susan Metko, YMCA Member, Fond du Lac Family YMCA
Tom Carrico, Swimming Pool Consultant, Carrico Aquatic Resources

Committee Members unable to attend:

Laurie Diaby-Gassama, Agent Health Inspector, St. Croix County Department of Health and Human Services
Shane Schwingle, Lifeguard Training and Staffing Consultant, Madison Area Technical College
Terri Olivo, WPRA Member, Signicast Aquatic Center in Hartford
Wisconsin Hotel and Lodging Association, Open Seat

Welcome and Introductions and Agenda Review:

The meeting at the Western Technical College began at approximately 9:30 AM and was attended by members from government (Health and Comm) and industry (Pool design and/or operations and lodging, recreational organizations). Members of the committee introduced themselves and then reviewed the agenda for the day.

Meeting Discussion:

The first item on the agenda was the last meeting's minutes. Approval of last meeting's minutes was agreed upon. Tom Carrico made a motion for approval and it was seconded by Doug Severson. The Minutes were unanimously approved.

The group began work on the issues list, with some homework results from the previous meeting:

Shane updated the group with proposed language for 172.33 (1)(e), maintenance of equipment. The language will reflect that maintenance should be done as required for each piece of equipment, and record-keeping done per manufacturers requirements. The group also wanted to change the language to require records to be kept for 3 years.

Peter Simon asked what records would be required under 172.11? Shane stated logging will be limited to items that require testing, such as SVRSs, and not just routine maintenance.

Tom Carrico asked how will inspectors know which items, of everything in the pool equipment room, needs to be tested. Shane stated they will prepare a list of likely items that may need to be tested and should have some associated records available for inspection. Jim K stated, similarly, that inspectors look for logs and bring items to the attention of the operator. He reminded the group that the operator is ultimately responsible for code compliance, even if a certain provision is difficult to “inspect.”

The proposed language was to modify 172.33(1)(e) to, “Pool equipment, including equipment on the deck, shall be properly located and installed. Equipment shall be operated and maintained according to the manufacturer’s recommendations. If the equipment manufacturer requires testing at regular intervals, records must be kept.”

Shane S asked if the language of 172.11 adequately describes and addresses VGBA-related items and their testing. The group did not object at this time.

The next issue from the previous meeting was regarding labeling. Shane summarized our decision from last meeting to split labeling language into 2 sections (FIFRA and non-FIFRA) and the need he discovered when he researched this to refer to complete language for FIFRA, as there were too many critical details within the federal requirement to summarize and place a concise version within 172. He was also concerned about duplication of labeling. If there was already an EPA required label, why would WI have an additional one? Shane showed the group 40 CFR 156.10 (6 pages), the federal regulation that the code language he is proposing will refer to. For non-FIFRA, the group felt only 3 simple items will be needed (name, active ingredient, manufacturers hazard info). Another concern in labeling arose regarding emergency responders, who also need to understand the contents of containers and make quick decisions.

The final proposed language was as follows:

DHS 172.12 Labeling, storing, mixing, and handling chemicals. (1) LABELING. Except for erosion feeders, which require only the name of the chemical, all chemicals used in the operation and maintenance of pools, and bulk storage tanks containing the chemicals, shall be conspicuously labeled. (a) All antimicrobial pesticides or disinfection chemicals used for pool disinfection must be in compliance with ATCP 29.06 and 40 CFR 156.10 labeling requirements. (b) All other chemicals used in the operation and maintenance of the pool must be labeled with the following information:

- (i) The common name of the product.
- (ii) Active ingredients.
- (iii) Any manufacturer's hazard classification.

Shane showed the group 40 CFR 156.10 (6 pages), the federal regulation that the code language he is proposing will refer to and described them briefly. There were no objections to this approach that were voiced.

We then moved on to new items on the list starting with ORP meters.

The first discussion revolved around ORP systems. 172.14 (5) sets forth wording related to ORP readings use of high and/or low indicator lights, accuracy and interpretation. Peter Simon provided some comments for background including, ORP as a means of tracking sanitizer level, the quality of disinfectant, and the representativeness of readings related to disinfectant present in pool. We also discussed the 650-850 mV range for ORP. Tom Carrico mentioned that the reference for the range of mV is WHO and 650 mV will kill most bacteria. We discussed what an appropriate range is as a group. Tom pointed out a couple myths about controllers, one of which is that after 850 mV the sensor is not any good. Shane proposed an experiment that could be used to determine upper limit, but Peter Simon stated there may be interference in the water.

Tom Carrico suggested all ORP language should be changed in code. He asked why should the upper limit be an issue? Removing the 850 mV upper limit was proposed by Dave as trigger for manually testing. The group agreed because ultimately, the manual test will inform the operator and sanitarian if the concentration is over 10ppm.

Is there an accuracy standard for ORP meters (mV increments)? Shane agreed to call some of the controller companies to research industry standards and capabilities and propose an accuracy standard. Pools with older, inadequate technology may need more manual testing and less reliance on and confidence in the ORP meter.

Tom Carrico has concerns about ORP agreement with free chlorine. They are not always necessarily indicators of each other. One "fault" of older meters was that you could add acid to the pool and the Chlorine concentration would increase. The true science is the mV's are increasing but the Free available chlorine is not.

Shane proposed considering for non-ORP pools to leave the disinfectant level requirements the same as they are, but, if there is an ORP, the "reward" is to allow lower minimum chlorine concentration in any pool as long as ORP meter is in use and operating. Doug Severson elaborated on this. 172.14(5)(b) could be adjusted, perhaps to 1 ppm, applicable to all pools or water basins. Shane will research and author some language.

Tom Carrico suggested looking at Iowa's code for help and suggestions so it was opened up as a file on the computer.

Shane cautioned the group about reliance on ORP limits that health can be comfortable with as ORP controllers are not always properly maintained. Tom Carrico has concerns about support

and rigid regulations for ORP for good operators. Peter Simon suggested a way to reconcile these. Shane asked if 1 ppm would be a burden for a properly operating (ORP in use) pool and the group did not object. Shane will modify the chart in 172.14 to allow for all pools with ORP systems to go down to 1 ppm.

Cyanuric acid:

The next discussion revolved around the cyanuric acid language in the code. A Representative had wanted to know why cyanuric acid was allowed. Shane stated there are ways to use it responsibly and at benefit to industry. New York State prohibits cyanuric acid use, which seems to be associated with a series of outbreaks in splash pads throughout the city. Wisconsin's limit is currently 30 ppm and NSPF's is 30-50ppm.

The group discussed the history of the cyanuric regulation. The group wants to leave the cyanuric acid limit at 30 ppm. Mike Nelson, Newman remarked that its effect on ORP meters may negate some of the benefits if used because it may impact the accuracy of ORP meters. Shane will talk to some controller manufacturers to determine their durability, reliability and sensitivity in the presence of cyanuric acid.

The group discussed banning it from indoor use. Previously this had been discussed but Legal had advised banning would not be legal. Now DHS legal stated that the chemical compound can be banned, we just can't attack one company's product. Shane stated it may not be advisable but should not be illegal, use of the chemical indoors is no more harmful than outdoors. It just offers no benefit to indoor pools.

Peter Simon asked if code related to chlorine levels required would be changed in relation to cyanuric acid; and Shane stated that they would not.

Bob Weiss asked if a caution could be added to the code. Shane stated that perhaps definition could be added of cyanuric acid to allow operators to understand cyanuric acid is intended for outdoor pools.

Tom and Shane remarked that banning cyanuric acid would significantly increase the cost of pool operation for outdoor pools.

172.14--Minimum disinfectant level for multiple pool types in the same basin:

The group agreed the highest disinfectant (strictest standard) for any of the pools would be required, unless an ORP controller was in use, in which case, 1 ppm would be acceptable as a result of the previous conversation. Doug Severson suggested add a separate sentence before the table to advise operators of multiple basins what level will be required. Peter Simon asked about how the language applies to a Water Attraction, the requirement for controllers, and the ORP requirement vs. chlorine requirement. The interpretive answer was that 1ppm would be acceptable under any circumstances when an ORP controller was installed. Glen Jones provided some clarification about pools slides, Water Attractions, Comm requirements, and ORP. The

group discussed adding ORP to chart on .14 and removing pool slides because they don't change the chlorine evaporation.

172.15 (1)--take out term "superchlorinate."

There was a suggestion to remove superchlorinate from this section. Shane explained that this section requires a backup system for all secondary treatment technologies. Salt water chlorine generation systems can't respond to a fast rise in bather load, so a stand-alone salt water chlorine generators is not allowed. 'Superchlorinate' limits the ability of the operator to respond (other techniques and types of chemicals that can be used). The group agreed this 'superchlorinate' can probably be removed. Peter Simon lead an informational discussion on chlorine generation from salt.

172.15-Metal ion systems as alternative technologies

Shane stated that no company has asked him about using this as alternative technology though an operator had. Shane asked if anyone else had been asked about this. Tom Carrico mentioned someone had asked him about it. Peter Simon mentioned that the technology had been used in residential systems. The ions supposedly reduce the need of chlorine. Metals can affect water balance and even hair color if not run correctly. This technology will be considered if needed in the future, but not until a company actually proposes it and Comm and DHS evaluate it. As a group, we want to encourage new technology as long as it doesn't compromise safety.

172.17 An approved test kit shall be kept at each site

Currently the code does not require a test kit at the pool location. Shane will refer this to Legal for their interpretation, comment and suggestions because the group agreed that the meaning is for a kit to be at each location. Glen Jones advised using term 'aquatic site.' Jerry Chilinski has concerns about operators mis-using Color Q kits and getting inconsistent results from the Color Q kits. Shane proposed adding language to code that will require operators to store, maintain and use test kits as manufacturer designs.

The group broke for an hour lunch at 11:50 AM

The group resumed and briefly discussed 172.19 and the use of auto-fills and the group decided it should be referred to the Comm 90 Committee.

Lifeguard Staffing Plan Approval

Grandfathering as it relates to lifeguard staffing plans was discussed. Peter Simon noted concerns about businesses making plans based in current codes and those codes changing to newly require guards for those same pools, as well as updating the code to reflect common sense. Shane explained that operational requirements, like staffing and chlorine residuals, are not grandfathered. He agrees that evaluating facilities based on "coverage" and "scanning zones" is the ideal, but a set of standards needs to be in place. The main suggestions are to integrate the

idea that one guard can sometimes cover multiple areas in the code and to apply common sense in reviewing and simplifying the chart.

There was discussion about lifeguard staffing plans, the sometimes inherently subjective review of them, the current chart that shows minimum numbers of guards, and the use of common sense in deciding how many guards and where versus going by the prescriptive standards and then requiring too many. The group may consider using 'saves' data to study this. Susan Metko mentioned we should consider reviewing use of attendants vs. guards and their training and certifications. There was more discussion about 'saves' data. Steve Matzl will provide some of this for leisure rivers as will Susan from flat water pools. We will review each section at the next meeting. Overlap of features may be allowed as appropriate. Glen J provided input regarding "obstructions" from Comm 90.31. Shane will try to contact insurance companies for injury data.

The last discussion was about the 172.22 language that needs to be cleaned up. ('every pool must submit lifeguard staffing plan') Also, the requirement to state average patron load before pool is opened was questioned. The group agreed to take out 'average' from patron load. Tom Carrico asked when does the plan need to be prepared (new owner? new pool operator?). The group discussed who runs the pool and determines number and placement of lifeguards and who should be responsible for preparing and following the plan. The response was for the new owner, but not necessarily for the new pool operator.

It was announced that the next meeting would involve discussions on qualified operators and lifeguard staffing requirements.

The meeting adjourned at 2:35 PM.

Next Meeting:

The next meeting is scheduled for Thursday, February 10, 2011 at West Wisconsin Technical College in Mauston from 9:30a.m. to 2:30p.m. The address is as follows:

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1000 College Avenue
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