Tuesday, September 13, 2011

I  Opening Remarks

Joint Committee Chairperson Steve Tackitt convened the meeting & welcomed the Committee members & observers. S. Tackitt introduced the new Joint Committee members: Valerie Hirata and Raj Solomon. L. Badman read the antitrust statement & received the agreement. Self-introductions were made.

S. Tackitt announced this would be his last Joint Committee meeting he will be chairing. He announced Tom Vyles as the new Joint Committee Chairperson. This will be a transition year where S. Tackitt will mentor T. Vyles. D. Riggs agreed to be the Vice Chair.

II  Review Meeting Summary

Motion: The September 2010 Joint Committee on Recreational Water Facilities meeting summary is approved. D. Riggs moved, B. Hamil seconded.

Vote: All were in favor.

III  Review of Agenda

Motion: The September 2011 proposed agenda is acceptable with the following revisions: issue papers RWF-2011-8, RWF-2011-12, & RWF-2011-15 will be moved to Tab 15, D. Purkiss will speak to the S. Hawksley issue (RWF-2011-32), and R. Martin will speak to B. Quinn/D.Biddy issues (RWF-2011-1 & RWF-2011-6). T. Palkon moved, S. Hunsaker seconded.

Vote: All were in favor.

Motion passed.

IV  General

A. Electrical requirement (RWF-2011-2)

Motion: The electrical equipment requirement proposal in RWF-2011-2 should be sent to ballot. T. Vyles moved, J. Mock seconded.

Discussion: This issue paper proposes moving the electrical requirement to Annex A. NEC covers various product requirements for GFI and electrical components. The language currently implies that the product meets the NEC with a NSF/ANSI 50 mark.
Further verification still needs to be obtained for NEC. The JC discussed if manufacturers should submit verification that they meet the requirements of NEC. The language would need to be more specific. It was determined that when certifying a product, verification should be done on a case by case basis.

**Vote:** 26 in favor. S. Campbell opposed

**Motion passed.**

**B. APSP 16 (RWF-2011-21)**

**Motion:** ASME A112.19.8 should be replaced with APSP 16. A. Osinski moved, K. Martin seconded.

**Discussion:** ASME has withdrawn A112.19 and CPSC has adopted the Standard.

**Vote:** All were in favor.

**Motion passed.**

**V Materials**

**Piping materials (RWF-2011-32)**

**Motion:** The proposal to expand the list of materials in 3.6.2 should be sent to ballot. C. Maitoza moved, T. Vyles seconded.

**Discussion:** The Task Group on Salt Water was charged to address materials. It was suggested the materials should be listed from most to least highest corrosion resistance to lowest. A standard for testing should be included with the proposal. The testing would need to be product specific. The test should include: How long should the material be exposed? Should a maximum be included? This issue should be sent to the Task Group on Salt Water to address. The Task Group will need to determine what materials should be bracketed.

**Vote:** None in favor.

**Motion failed.**

**Motion:** The issue should be sent to the TG on Salt Water with the charge to evaluate stainless steel criteria to a 600 ppm aqueous solution of sodium chloride. T. Vyles moved, P. Sisson seconded.

**Vote:** All were in favor.

**Motion passed.**

New Chairperson: B. Steinbrueck; additional TG members – T. Palkon, R. George

**VI Design & Construction**

**PVC hose tek tub/plastic pipe housing (RWF-2011-1 & RWF-2011-6)**
Motion: The issue regarding dimensional tolerances should be sent to the Task Group on Materials. S. Campbell moved, B. Vincent seconded. 

Discussion: This should include a filter pressure test. 

Vote: All were in favor. 

Motion passed.

VII Cartridge Filters

A. Filter cleaning (RWF-2011-11)

Manufacturers have no control of the replacement filter media used in their product. There is no longer a need to list that ABC manufacturer filters need to be used as a replacement. There is no concern over who manufacturer list – the concern is that once it is in the field there is no control.

The cleaning instructions indicate that the filter needs to be cleaned and be replaced after x cleanings. It is important that the interval of cleaning is included. A single cleanability test – not a series - is included but synthetic dirt is used. Testing may or may not be done on the replacement filter. Some states do not allow the use of cartridge filters due to the cleaning concern. More rigorous testing requirements that included multiple cleanings should be considered. An informational statement and test is needed. There are several variables – difficult to say that X amount of cleanings are needed. A PSI difference might be a better option.

The JC tabled this issue until Tab 15.

B. Filter media (RWF-2011-20)

Motion: A Task Group should be formed to address the adverse effects on filters (all media types) during short and long term use. T. Palkon moved, S. Andrew seconded.

Discussion: A problem exists when a standard gives different testing resulting. More rigor needs to be included.

Vote: All were in favor. 

Motion passed.

Task Group: S. Andrew (Chair), S. Campbell, T. Vyles, T. Palkon, K. Jenke, B. Johnson, A. Levin, S. Choe, & C. DiGiovanni

VIII Centrifugal Pumps

A. Pump vacuum level recording & reporting (RWF-2011-18)

In the Las Vegas area, external variable speed drives that can be added to a pump and motor are becoming more prevalent. However, these pumps are not visible to inspectors. They are marketed as being energy efficient, which is a good thing. These pumps are an accessory to the motor. Pump curves are not the same for external variable speed drives. Several curves are listed to be used. Variable speed pumps are not certified for VBG. The flow is unknown. When an external variable speed device is attached to the motor, it affects frequency and the frequency...
affects the vacuum the on pump. The response time could be slower with an external variable speed drive. Two competing issues exist:

1. Certain flow rate – slow down unless turnover (turnover rate needs to be identified)
2. Any slow down – variable vacuum levels which cause problems with SVRS

External variable speed drives are adjustable. C. DiGiovanni requested V. Hirata send him an overview of the concerns. He will distribute it manufacturers in the industry for answers.

At this time, the JC will take no action.

B. Sound (RWF-2011-23)

NSF International's laboratory compared various standards. The laboratory used 70° as worse case. Noise levels will change based on geographic locations. A concern was raised regarding the noise from air blowers. It is believed that if air blowers are not addressed, the sound issue is not being addressed. It was pointed out that this proposal was to address residential concerns.

**Motion:** Language needs to be created addressing the sound concern and sent to ballot. B. Hamil moved, D. Purkiss seconded.

**Discussion:** The ballot language will be based on the report. Regulations do exist and should be consulted. The states are interested in having a method so that sound is assessed in a uniform manner. The method will used as basis for evaluation. This proposal will be optional for manufacturers and does not include a pass/fail requirement. This would allow a manufacturer to obtain a sound rating for the pump.

**Vote:** All were in favor.

**Motion passed.**

IX  Multi Port Valves

Valve handle (RWF-2011-5)

**Motion:** The proposed modification to 7.2.3 should be sent to ballot. T. Vyles moved, S. Campbell seconded.

**Vote:** All were in favor.

**Motion passed.**

**Motion:** The proposed modification to 7.8 regarding the power to the pump should be shut off should be sent to ballot. T. Vyles moved, S. Campbell seconded.

**Vote:** All were in favor.

**Motion passed.**
X  **Recessed Automatic Surface Skimmers**

A. Skimmer cleanability (RWF-2011-16)

Angles and corners under skimmer lids need to be defined.

**Motion:** The proposed modification to 8.5.3 regarding skimmer lids should be sent to ballot. S. Campbell moved, A. Osinski seconded.

**Discussion:** Manufacturers would like to review the proposal prior to ballot.

**Vote:** All were in favor.

**Motion passed.**

B. Non recessed skimmers (RWF-2011-28)

R. Martin proposed the addition of non-recessed skimmers to NSF/ANSI 50. No modifications would need to be made to the current requirements. The requirements would remain the same. Some felt non-recessed skimmers where the operator needed to reach in the weir and pull out the basket should be banned. Air entrapment issues exist with this type of skimmer. The non-recessed skimmers that are being discussed have an air gap. Skimmer baskets are hard to remove.

**Motion:** The Task Group on skimmers should be reactivated and the non-recessed skimmer issue should be sent for further review and development. T. Vyles moved, S. Campbell seconded.

**Vote:** All were in favor.

**Motion passed.**

XI  **Flow-Through Chemical Feeding Equipment**

A. Lids (RWF-2011-9)

S. Campbell showed the same feeder lid being used in different applications. There was no difference for the labeling of the lids. Entrapment exists in these lids. There is no automatic relief valve. Lids for feeders need to be properly labeled and include the proper warnings. Interchangeable parts need to be tested for water pressure and air entrapment. The lids need some type of redundant closure system, automatic air relief etc. A way to release the air is needed.

**Motion:** The Task Group on Chemical Feeders should be reactivated and should address the concerns regarding lids. T. Vyles moved, S. Campbell seconded.

**Discussion:** Additional expertise can be added as needed to the Task Group.

**Vote:** All were in favor.

**Motion passed.**
B. Feeder output control flow control (RWF-2011-24)

There is no mechanism for controlling the dispensing of a chemical unless an automated controller is used. An automated controller is not required. Feeders have failed in the off position but can fail in the on position. The standard cannot specify that a certified controller is used. The proposal could include a reference to section 17 – Automated controllers.

Motion: The proposal should be sent to ballot including a reference to section 17 of NSF/ANSI 50. S. Campbell moved, T. Palkon seconded.

Vote: All were in favor.

Motion passed.

XII Effects One or More Types of Process Equipment

Residential pressure (RWF-2011-27)

It is repeatedly heard that filters are safe because they meet the working pressures of the Standard. Filters are separating due to air entrapment issues. Use and misuse of products are seen in the field. Separate testing is needed for air issues, cautionary statements are needed. Residential filters could be used in a commercial application.

After much discussion, the requirements will remain as written.

XIII In-Line Electrolytic Chlorinator or Brominator Process Equipment

Electrolytic ClBr (RWF-2011-17)

Motion: The proposal in 14.2 and 15.2 should be sent to ballot. T. Vyles moved, J. Mock seconded.

Discussion: The current spa temperature in NSF/ASNSI 50 is 102°F, which represents worse case. The tolerance of ± 5 will not have an impact. The language should be modified to ‘minimum rated pressure’.

Vote: All were in favor.

Motion passed.

XIV Copper/Silver and Copper Ion Generators

Copper test kits (RWF-2011-7)

Copper test kits are easily accessible and should not be included in the Standard. Section 16.8.1 should be removed from NSF/ANSI 50. It was suggested that the requirements be removed after the Task Group on Water Quality Testing Devices completed their work.

Motion: The test kit requirements for copper should be removed from section 16. A. Osinski moved, S. Campbell seconded.
Friendly amendment: The first sentence in the second paragraph of 16.1 and section 16.8 should be struck. A. Osinski moved, S. Campbell seconded.

Vote: All were in favor.

Motion passed.

XV Automated Controllers

Automated controllers (RWF-2011-19)

As written, the language specifically allows the use of a different probe, which may lead to issues. The proposal would require a literature modification. The probes have been tested and the testing indicated the probes vary. Each probe has a different sensitivity. The proposal would require the product to be tested. Every new combination should be evaluated. More than signal output has to be evaluated. It was suggested that probes be manufactured for specific units (a unique shape etc). The manufacturer would be penalized if they were required to make unique probes.

The proposal also requests measuring 4 points not 3 points. A rational statement will be included in the ballot.

Motion: The language ‘sensor output signal requirements’ should be struck from 17.8 and 17.9 and sent to ballot. B. Hamil moved, T. Vyles seconded.

Discussion: Replacement sensor can change of time. Manufacturers have a plan to deal with replacements. The unit listing would be modified to include the new sensor.

Vote: All were in favor.

Motion passed.

XVI Annex G

Flow through feeder tank (RWF-2011-3)

Less chlorine would be in the tank. This proposal does not relate to an electrolytic chlorinator.

Motion: The proposed modification to Annex G should be sent to ballot. D. Purkiss moved, K. Martin seconded.

Discussion: The temperature requirement Table in G.3.3.3 should be modified to be 102° ± 5.

Vote: All were in favor.

Motion passed.
XVII New Section Proposals

A. Pool Chemicals (RWF-2011-4)

NSF/ANSI 60 addresses chemicals that are ingested through drinking water. Whereas chemicals in pools have dermal contact and may accumulate in a pool. Currently NSF/ANSI 50 does not address efficacy of chemical. Chemical performance, functionality and evaluation need to be considered.

It was noted that NPS is currently working on this project, what is in a pool and what is the resulting effect. Different chemical reactions will result in different by-products. What occurs cumulatively, what reactions etc. Addressing by-products would be a huge task. The Task Group would be limited to addressing only the chemicals being injected into the pool. The synergism is very important but very little is known about the synergism between all the chemicals. It is important to know that the current chemicals are working correctly. Tablets and test water for feeders needs to be addressed.

Parts of NSF/ANSI 60 can be used as a basis. The pool water chemistry would be different and chemical resident testing would need to be included. A Task group should be formed to develop evaluation criteria for pool chemicals. Health effects, label verification and performance should be addressed. Sanitizers should be included.

**Motion:** A Task Group should be formed to create evaluation criteria for pool chemicals. B. Hamil moved, Z. Hansen seconded.

**Vote:** All were in favor.

**Motion passed.**


B. Section 12 & 13 (RWF-2011-8)

MSDSs are required by federal law on all chemicals. MSDSs do not all look the same or have the same information. Some are very vague. MSDSs are required to be on-site and this is enforceable by the law OSHA has oversight. Guidance language could be included in the Standard on such items as labeling and marking.

**Motion:** The issues outline in RWF-2011-8, -12, and -15 should be sent to the Task Group on Pool Chemical Evaluation to address. The Task Group should report back at the next JC meeting. A. Osinski moved, T. Palkon seconded.

**Vote:** All were in favor.

**Motion passed.**

C. Non-integral Strainers (RWF-2011-22)

**Motion:** The proposed language for non-integral strainers should be sent to ballot. S. Hunsaker moved, S. Andrew seconded.

**Vote:** All were in favor.

**Motion passed.**
D. Cartridges (RWF-2011-26)

**Motion:** The issue on cartridges should be sent to the Task Group on Turbidity. B. Hamil moved, C. Maitoza seconded.

**Vote:** All were in favor.

**Motion passed.**

### Project Updates – Informational Items

#### TG on Regenerated Media (RWF-2011-10)

**Motion:** The proposed revision to regenerated filter media should be sent to ballot. T. Vyles moved, P. Sisson seconded.

**Discussion:** A multiplier could lead to long term issues with filters. As written, a 2 in clearance is needed. A 1 in coating would be eliminated. Some are concerned that the product class is at risk. Products is being sold to owners as self-maintaining Some filters last the entire summer but others do not. The multiplier was based on antidotal information. How much pre-coat remains? It is being called incidental bridging.

By playing nice is a risk being created? The filters are competing at the lowest level because of price. This might be a mistake that will make consumers walk away. No one knows what happens in the long term with theses filters. A longer test could be created looking at bridging and non-bridging. Safety margins should not be lowered.

All products need to meet the minimum requirement, which is easy to do. Most products can achieve the requirement in the first turn. The issues that exist are: defining surface area, incidental bridging, velocity and media degradation over time. The weakest link (cost) is the focus not safety. These products have great potential but the standard allows incidental bridging and slow migration and is not based on science.

The proposed test is not a performance test for cleaning, dirt load, capacity etc. In the 1990s, incidental bridging was allowed by design. The NSF short term test demonstrated that turbidity and cleanability was not impacted by bridging. Long term testing should be looked at in the field. However there has been continuous change in the industry.

The real issue is the technology. The definition of incidental as used in this context is elements (flexible etc.) grouping together to form one element. This is not incidental. Other issues exist. These filters have great benefits but will not be purchased if the owner’s expectations are not being met. Long term use is not as promised to the owner.

Incidental bridging is inherent in the design. The testing demonstrated that the performance was not compromised. This Standard should have a minimal value to the industry. It is not just a manufacturer’s issue, it is also a designers issue.

**Vote:** Majority opposed.

**Motion failed.**

#### TG on Water Quality Testing Devices (RWF-2011-25)

An oral presentation was provided by R. Martin.
Recent Ballot Review (RWF-2011-30)
An oral presentation was provided by R. Martin.

Hot tub & aquatic exercise spas (RWF-2011-31)
An oral presentation was provided by R. Martin.

TG on Turbidity (RWF-2011-33)
An oral presentation was provided by B. Johnson.

Sustainability
An oral presentation was provided by T. Bruursema.

TG on Life Testing
An oral presentation was provided by S. Choe.

TG on Ozone
An oral presentation was provided by S. Choe.

TG on Salt Water
Information paper not provided.

TG on Temperature & Tolerances
Information paper not provided.

TG on UV
An oral presentation was provided by S. Choe.

TG on Vacuum Pressure
Information paper not provided.

TG on Valves
Information paper not provided.

XVIII  Committee Administrative Issues
L. Badman provided a review of the policy and procedures. Comprehensive review session of the policies will be offered in the near future.

XIX  Other business
XX Meeting summary

The next Joint Committee on Recreational Water Facilities meeting will be held on September 18, 2012.

ADJOURN
Meeting Participants

Joint Committee Members

Chairperson, Steve Tackitt (Barry-Eaton District Health Department)
Steve Andrews (Nemato Composites)
Suzie Campbell (Oklahoma City-County Health Department)
Carvin DiGiovanni (Association of Pool & Spa Professionals)
Rick Ferguson (PPG Industries)
Benoit Gillman (Bio-UV/Delta UV)
Que Hales (Pool Chlor)
Beth Hamil (DEL Ozone)
Zach Hansen (Bio Lab, Inc) proxy for Mary Costanzo
Valerie Hirata (Southern Nevada Health District)
Scot Hunsaker (Counselman – Hunsaker)
Ramesh Kapur (Consultant – Public Health/Regulatory)
Adolph Kiefer (Adolph Kiefer & Associates)
Tong Leigh (ATG Willind)

Colleen Maitoza (County of Sacramento Environmental Mangement)
Kenneth Martin (Aquatic Design & engineering Inc.)
James Mock (Ecolab, Inc.)
John O’Hare (Hayward Pool Products, Inc.)
Alison Osinski (Aquatic Consulting Services)
Tom Palkon (Water Quality Association)
Dave Purkiss (NSF International)
David Riggs (Columbia County Public Health Department)
Paul Sisson (State of Michigan)
Raj Solomon (State of New Mexico)
Brett Steinbrueck (BECs Technology, Inc.)
Craig Steinheimer (Illinois Department of Health)
Bob Vincent (Florida Department of Health) proxy for Robert Pryor)
David Von Broembsen (ChlorKing Incorporated)
Tom Vyles (City of Plano Health Department)

Joint Committee Members not in attendance

Alex Antoniou (National Swimming Pool Foundation)
Michele Hlavsa (CDC)

Lea Jaunakais (Industrial Test Systems, Inc.)
William Linder (ITT Industries)
Lee Wikstrom (Consultant – User)

Observers

Scott Anderson (Fiber Web)
Frank Baker (Fiber Web)
Brian Bokowy (Allchem Performance Prod)
Don Conwell (Emperor Aquatius)
Ron George (ETS)
Ken Jenke (Zodiac Pool Systems)
Brice Johnson (Pentair)
Angela Jones (Southern Nevada Health District)
Keith Krebs (Emperor Aquatius)

Alan Levin (Hayward Industries)
Jarred Morgan (Orenda Technologies)
Gayle Seversen (Ecolab, Inc.)
Jeff Smith (Pentair)
Konrad Weitzeil (Delta UV)
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