Task Group on Warewashing Equipment
Teleconference Meeting Summary

November 28, 2007

Participants

Joel Hipp (Hobart Corp), Jim Whitehead (Auto-Chlor Systems), Tony Gagliardi (Forsyth Co. Health Department), Rick Yanez (Knight Equipment.), Wilbur Haag (A.O. Smith Water Products Co.), Adrian Hartz (Ecolab, Inc.), Russell Payzant (American Dish Service), April Gravelle (Manitoba Environment), Todd Stephens (South Carolina Department of Health), Jonathon Brania(UL), Ben Gale (Santa Clara County, DEH), Moe Gendy (Champion Ind.), Kevin Smith (FDA), Mike Kohler, & Lorna Badman (NSF).

Discussion

L. Badman read the antitrust statement. J. Hipp welcomed everyone. J. Hipp indicated that today's topic would address the EPA response on the potable water rinse issue.

The 3 main issues with the current proposal are:

1. Conflict with the EPA labeling requirement
2. Drying time of ware and space for drying the ware.
3. Conflict with the Food Code

EPA's 6th response is based on immersion and is less controlled. North Carolina regulations are based on the FDA 2 minute immersion.

EPA's 7th response caused the most discussion. A study in the 1990s demonstrated that a 5-log kill was obtained with a reduced exposure time of 7 seconds using sodium thiosulfate.

In a boil water advisory,a facility may be allowed to continue to use a dishwasher since the final rinse water is either heated to 180°F or includes a chemical sanitizing agent.. However, with a post-sanitizing potable water rinse machine, the ware might be rinsed with contaminated water. This could cause a facility to close down. If machines were available with a post sanitizing rinse an option to shut the post rinse off would need to be available. A. Gravelle indicated she would change regulation to prohibit machines with post-sanitizing rinse capabilities. The concern is that it would be difficult for the local Health Department to keep track of which sites included post-sanitizing potable water rinse machines and which did not. M. Kohler pointed out that boil water advisories are outside the scope of NSF 3 since paragraph 5.12.1 states, "The final sanitizing rinse

supply water shall be from a potable source and shall not contain recycled water from previous machine cycles."

It was suggested to incorporate language regarding a boil water alert, possibly on a label.

The terms Advisory and notice were reviewed. An advisory indicates that there could be a problem but facilities can continue to operate. A notice informs facilities that a problem exists and they are prohibited to operate. Incidents need to be looked at on a case-by-case basis. A large amount of potable water would need to be contaminated for a facility to stop operating. Advisory and notices are based on risk. A boil water advisory is initiated when 10 coliforms are present - there would be less in a dishwasher. There are public service announcements for boil water advisories, which could be for microbial or chemical. A boil water advisory may not allow the use of a post sanitizing rinse. If the machine has an off switch for post sanitizing rinse, then the use of the machine might be allowed. Some disagreed with this statement but everyone agreed that communication would be the key.

Boil water advisories/alerts are handled different by each state. South Carolina has a program that notifies establishments when the water is unsafe to use. Other states require that everyone shuts down and can only re-open after an audit.

The issues being discussed could impact other areas such as vegetables and fruit. Vegetables sanitized with chemicals require a post-sanitizing potable water rinse.

FDA requires the sanitizer to remain on the ware and to air dry. A post sanitizing rinse would be in conflict with the Food code. J. Hipp noted that a proposal was being prepared for the Council for Food Protection to allow potable water rinse for commercial dishwashers tested to the sanitation performance criteria.

J. Hipp indicated that the bacteria swab test would be required for ware washing machines with a post-sanitizing rinse and a 5-log kill requirement would be maintained. European countries use post-sanitizing rinses. Where is the issue? The safety is derived with the sanitizer on the surface. As part of a ware washing machine's cycle, the ware is sanitized and allowed to air-dry. While the air-drying occurs, the sanitizer is allowed to do its work. After the ware has dried, the ware is considered safe. It was pointed out that in the early '90's, the FDA sponsored tests that showed 5-log kill was maintained with exactly 7 seconds of exposure with no time for residual kill (sodium thiosulfate used to neutralize the chlorine).

The group moved to discussing the requirements on the EPA label. EPA requires the sanitizer to be used according to the label instructions. The label instructs the user not to rinse equipment with water after sanitizing and to allow articles to air dry before removing from rack. EPA's 7-23-07 response to the Task Group's questions includes the following statement: "the recommendation of potable water rinse after food-contact surfaces have been treated with a sanitizing rinse is not acceptable for products intended for use as a terminal sanitizing rinse". Ware washing machines would be in violation of

the labeling requirements. Again, it was noted that the bacteria swab test would be required and a 5-log kill requirement would be maintained for these machines.

The FDA and EPA requirements are in conflict. The EPA requires the sanitizer to be in contact for 1 minute. In the Food Code, the sanitizer only needs to be in contact with the ware for 30 seconds. The question is how to ensure sanitization. It comes down to contact time. Tests demonstrate that it takes 30 seconds of contact time on all surfaces to ensure an adequate kill. 7 seconds does not ensure there is equal sanitizer distributed across the surface of the ware. The FDA and EPA requirements should be consistent. This has been a topic of CFP meetings and the CFP is wrestling with these issues. Clarification should be included in the annex.

T. Stephens brought to the group's attention the exception in the Food Code for auxiliary components as long as it is included on the data plate – science has taken us here. Let the performance deal with the issue. The Food Code requires sanitization but the listings do not. The CFP allows an exemption for mechanical ware washing machines. Post-sanitizing rinses potentially could be allowed under this exemption.

It is believed that safety is derived with sanitization and no post-sanitizing rinse. There would be a big shift in the Food Code if post-sanitizing rinses were allowed. Safety factors are part of science. A 5-log kill and 3600 hues include safety factors. Concerns were raised regarding wet ware and the prohibition of towel drying. Air-drying is an issue with space. In high output bars, bartenders do not wait for the glasses to dry.

The group moved to discussing the draft. The group felt that spray assemblies should not be exempt from post-sanitizing rinse requirements.

The Task Group has the following concerns on the proposal:

1. Boil water advisories – Would a ware washing machine with a post-sanitizing rinse be permitted with an off switch and information included on the label?
2. Proposal is in conflict with the Food Code
3. Label conflict with the EPA requirements
4. Drying time extension
    a. Additional space required for extended drying time.
    b. Excess water and moisture.

A ballot should be prepared and sent to the Joint Committee. Section 5.10.4 should be excluded. The cover memo should include the 4 concerns that Task Group members discussed.

JC Cover Memo:

On behalf of Mr. Joel Hipp, issue proponent, Draft 2 of NSF/ANSI 3 issue 6 is being forwarded to the Joint Committee on Food Equipment for consideration. Please review the proposal and return your ballot **by the ballot due date of** via the e-balloting system or by e-mail to durbin@nsf.org.

Purpose
The purpose of the ballot is to add specific wording in NSF/ANSI 3 to allow a potable water, post-sanitizing rinse on commercial dishwashers.

Background
European systems often provide a clean, potable water rinse after the sanitizing step to either allow dishes to be handled with less discomfort or to remove residual sanitizer taste and odor. Since this water is potable and the dishes must be dry before use, there is no impact on public health. NSF/ANSI 3 will be modified to require the final sanitizing performance test to be completed with the post-sanitizing rinse in operation in either the hot-water or chemical sanitizing mode. This "worst case" situation should alleviate concerns that the sanitizing step would be compromised with a cold water rinse after sanitizing. An additional requirement for chemical sanitizing machines has been added for a readily accessible means to temporarily deactivate the post-sanitizing rinse. This will allow verification of the sanitizer concentration.

FDA Food Code paragraph 3-302.15 (A) states, "…raw fruits and vegetables shall be thoroughly washed in water to remove soil and other contaminants before being cut, combined with other ingredients, cooked, served, or offered for human consumption in ready-to-eat form."

FDA Food Code paragraph 4-703.11(C)(4) states, "After being cleaned, EQUIPMENT FOOD-CONTACT SURFACES and UTENSILS shall be SANITIZED in chemical manual or mechanical operations, including the application of SANITIZING chemicals by immersion, manual swabbing, brushing, or pressure spraying methods, using a solution as specified under § 4-501.114 by providing an exposure time used in relationship with a combination of temperature, concentration, and PH that, when evaluated for efficacy, yields SANITIZATION as defined in Subparagraph 1-201.10(B)."

The Task Group on Ware washing met twice to discuss post-sanitizing rinses. The Task Group had the following concerns on the proposal:

1. The proposal would be in conflict with the Food Code. The Food Code requires ware to be air dried (4-501.114). However the Food Code does not specifically exclude a potable water rinse. If the ballot is successful, the CFP will need to address this issue. A proposal is being prepared independently for the Council for Food Protection to allow potable water rinse for commercial dishwashers tested to the sanitation performance criteria.
2. Conflict with the EPA labeling requirement. EPA's 7-23-07 response to the Task Group's questions includes the following statement: "the recommendation of potable water rinse after food-contact surfaces have been treated with a sanitizing rinse is not acceptable for products intended for use as a terminal sanitizing rinse".
3. Boil water advisories indicate there could be a problem in the water distribution system but a facility may be allowed to continue to operate in many jurisdictions. Boil water notices inform facilities that a problem exists and they are prohibited to

operate. Should a ware washing machine with a post-sanitizing rinse be permitted with an off switch and information included on the label in boil water advisories and notices? It should be noted that boil water advisories are outside the scope of the NSF standards since paragraph 5.12.1 states, "The final sanitizing rinse supply water shall be from a potable source…."

4. Drying time extensions for the ware. Excess space is needed for drying. There would also be excess water and moisture with a post-sanitizing rinse.

For detailed information on the above concerns, please see the meeting summaries under supporting documents.

Public Health Impact
There is no impact on public health.