COMMITTEE NAME: Clean in Place Committee

DATE OF REPORT: ☒ Spring progress report  ☐ Initial fall progress report  ☐ Second fall progress report

Date submitted: Click here to enter a date. Date amended (if applicable): Click here to enter a date. Date accepted by Executive Board: Click here to enter a date.

COMMITTEE ASSIGNMENT: ☒ Council I  ☐ Council II  ☐ Council III  ☐ Executive Board

REPORT SUBMITTED BY: Sandra Craig and Dale Grinstead

COMMITTEE CHARGE(s):

Issue # _2016-I-010_
1. Review applicable ANSI sanitation standards for clean in place processes with inaccessible food contact surfaces and ascertain their compatibility with Food Code definitions and recommendations
2. Review current literature on scientific research of clean in place systems to ascertain relative food safety risk associated with improperly cleaned and/or sanitized systems
3. Conduct a survey to determine the current prevalence and processes used to evaluate CIP Equipment during inspections
4. Report back to the 2018 CFP Biennial Meeting with recommendations

Issue # __________
1. 
2. 

COMMITTEE WORK PLAN AND TIMELINE:

1. Background or executive summary: The committee was formed and active in August 2016. After the first 2 full committee calls it was clear that a subcommittee structure would work best to deliver the charges to the committee. Two subcommittees were formed and the most of the calls after September were subcommittee only with infrequent full committee calls.

2. Sub-committee or workgroup structure: Two subcommittees were formed:
   a. Literature review: This committee is tasked with drafting the reviews that address charge 1 and 2. The committee is scheduled to have a draft review to the full committee in April 2017
   b. Survey Committee: This committee is tasked with creating and conducting the survey in charge 3. The committee has completed the survey question creation and is working on implementation of the survey with a target of mid to late May for sending the survey out.

3. Communication and consultation outside the committee: The European Hygienic Engineering and Design Group (EHEDG) is developing a new CIP guidance and they were contacted to get an early draft of their CIP guidance. Manufacturers of equipment (e.g. ice cream machines) that are frequently cleaned via a CIP process and used in retail and food service settings were also contacted to obtain their guidance on CIP systems as well as CIP process validation procedures that they use internally or recommend for customers.

4. Changes to work plan and timeline based on challenges: None to date

COMMITTEE ACTIVITIES:

1. Dates of committee meetings or conference calls:
   - August 22nd (Full committee)
   - September 29th (Full committee)
   - November 1st (Survey Sub-committee)
   - December 9th (Literature review Sub-committee)
2. Overview of committee activities:

Several calls of the full committee were held. We reviewed the charges and began to review literature. The committee decided that it would be more efficient to break into subcommittees

- Literature review Sub-committee: The sub-committee met for 2 calls. Most of the focus of the sub-committee for December, January, and February was on collecting literature. We use the Drop Box tool to share literature that each subcommittee member finds with the rest of the subcommittee. The drop box site is: [https://www.dropbox.com/home/CFP%20CIP%20Literature%20committee#](https://www.dropbox.com/home/CFP%20CIP%20Literature%20committee#)  
  Several points from what has been reviewed so far seem relevant:
  - Although the risk of an un-cleaned food contact surface that should be cleaned via CIP may be similar to that of any other food contact surface, the inaccessibility and inability see that the surface is soiled may make the risk more likely to occur. However there may be a research need in this area.
  - Validation of clean for surfaces cleaned via CIP can be problematic, again because those surfaces are not accessible.
  - Biofilms MAY be a particular concern for surfaces cleaned via CIP and that could add another layer of risk.
  - There may be some ANSI standards that do not align 100% with the food code however the differences seem to be minor.

Literature collection will be ongoing and the first draft of the review is due back to the full committee in April.

- Survey Sub-Committee: The sub-committee met for 2 calls. The focus of these calls and subsequent committee email exchanges has been to formulate the questions for the survey. The calls were to define our scope. Once this was accomplished questions were assembled and vetted via emails to committee members during December and January. A completed set of survey questions are now ready to be shared with the full committee.

3. Charges COMPLETED and the rationale for each specific recommendation:

   a. 

   b. 

4. Status of charges still PENDING and activities yet to be completed:

   a. Charges 1 and 2 are still being addressed via the Literature review committee. First draft of the review is due to the committee in April. Charge 3 is being addressed by the survey committee and the survey is targeted to be complete by mid-June.

COMMITTEE REQUESTED ACTION FOR EXECUTIVE BOARD: ☒ No requested action at this time

1. Dale Yamnik left the committee as he retired in late 2016. However as he was an at-Large member there is no need to replace him on the committee therefore there is no need for action from the Executive board on this matter.

2. ATTACHMENTS:

   1. Content Documents:

      a. Committee Member Roster: ☒ See changes noted above under “requested action” ☐ No changes to previously approved roster

      “Committee Members Template” (Excel) available at: www.foodprotect.org/work/ Committee roster to be submitted as a PDF attachment to this report.

      b. Committee Generated Content Documents (OPTIONAL): ☐ No draft content documents submitted at this time

   2. Supporting Attachments (OPTIONAL): ☐ Not applicable
• Draft Survey
CIP Survey Questions

FDA Food Code defines CIP as:

(1) "CIP" means cleaned in place by the circulation or flowing by mechanical means through a piping system of a detergent solution, water rinse, and SANITIZING solution onto or over EQUIPMENT surfaces that require cleaning, such as the method used, in part, to clean and SANITIZE a frozen dessert machine.

(2) "CIP" does not include the cleaning of EQUIPMENT such as band saws, slicers, or mixers that are subjected to in-place manual cleaning without the use of a CIP system.

With this definition in mind, please answer the survey questions.

1) How has your company/jurisdiction determined the right cleaning and sanitizing frequency of Clean in Place or “CIP” equipment?
   a. Based on recommended frequency of equipment manufacturer?
   b. Based on observations of equipment cleanliness in your facility?
   c. Based on analytical testing results?
   d. Based on the FDA Food Code
   e. Other: Please explain____________________________________

2) How often is your company cleaning and sanitizing equipment that is a Clean in Place or “CIP” equipment? Or how often does your jurisdiction expect Clean in Place or “CIP” equipment to be cleaned and sanitized?
   a. Every 4 hours
   b. Daily
   c. Weekly
   d. Bi-weekly
   e. Other Please explain____________________________________

3) Is your company or facilities you regulate using a 3rd party cleaning company for CIP equipment?
4) How are you validating the effectiveness of the cleaning and sanitizing of “CIP” equipment?
   a. Monitoring charts  
   b. Sampling/Testing  
   c. Other: Please explain______________________________________________

5) How confident are you that nonvisible food-contact surfaces of “CIP” equipment are properly cleaned and sanitized?
   a. Very confident  
   b. Somewhat confident  
   c. Neither confident or not confident  
   d. Somewhat not confident  
   e. Not confident at all  

6) What steps are taken when you and / or an inspector are unable to access sections of a piece of CIP equipment to ensure that it is being cleaned properly and frequently enough?
   a. Cease using equipment  
   b. Call for technical assistance  
   c. Swab and test  
   d. Other: Please explain______________________________________________

7) Do you feel that the current manufacturer’s recommendations are adequate in ensuring that your “CIP” equipment is being properly cleaned?
   a. Yes  
   b. No  
   c. Don’t know  

8) Do you feel that the current FDA Food Code adequately addresses your concerns regarding the cleaning and sanitizing of CIP equipment?
   a. Yes
b. No
c. Don’t know

9) Are you aware that the FDA Food Code differentiates between clean in place (CIP) and in-place manual cleaning?
   a. Yes
   b. No

10) Does your company/jurisdiction use the FDA Food Code to establish policies, procedures, requirements, rules, or compliance with regard to cleaning procedures and/or cleaning frequency for food-contact surfaces?
    a. Yes
    b. No

11) If yes to question 10, what version(s) of the Food Code are utilized (even if not adopted)?
    a. 2013
    b. 2009
    c. 2005
    d. 2001
    e. 1999
    f. 1995-1997, older version]

12) Does your company/jurisdiction feel comfortable assessing the effectiveness of CIP equipment?
    a. Yes
    b. No

13) Does your company/jurisdiction evaluate the cleanability of each piece of CIP equipment prior to approving its use?
    a. Yes
    b. No

14) Does your company/jurisdiction evaluate the effectiveness of
cleaning CIP equipment on a regular/ongoing basis?

a. Yes
b. No

15) What type(s) of equipment do you expect to be “cleaned in place”?

a. Ice machine
b. Shake/soft serve machine
c. Air brush line
d. Edible art printer
e. Slicer
f. Other: Please explain____________________________________

16) When inspecting equipment (whether as part of a daily cleaning checklist or for compliance with regulatory requirements) that contains food-contact surfaces that are not visible without disassembly, is the equipment disassembled for inspection?

a. Yes, every time the equipment is inspected
b. Yes, as long as the equipment is not in use or can be disassembled without disrupting operation
c. Yes, as long as no tools are required
d. Usually, but not every time
e. Yes, but only if there are visible signs to indicate cleaning may be needed
f. Some equipment is disassembled and some is not
g. No
h. Don’t know

17) What, if anything, hinders the ability to inspect (whether as part of a daily cleaning checklist or for compliance with regulatory requirements) food-contact surfaces of equipment that are not visible without disassembly?

a. Availability of tools
b. Knowledge of what/how to disassemble
c. Too difficult to disassemble or reassemble
d. Time constraints

e. Policies (not permitted to disassemble, only certain people can disassemble, etc.)

f. Other: Please explain___________________________________

18) Does your company/jurisdiction rely upon data other than personal visual inspection to determine cleanliness of food-contact surfaces of equipment that are not visible without disassembly?
   a. Yes
   b. No

19) If Yes to Question 18, specify:
   a. During cleaning by manufacturer/distributor/contractor
   b. Third party cleaning audits
   c. Product testing
   d. Specific cleaning intervals
   e. Other: Please explain___________________________________