

Sponsored by IAFP Food Hygiene & Sanitation PDG

Led by MOM Brands: John Erickson and Fred Cook

### Conference Call Notes

The concept of Effective Practices Discussions was initiated at last year's FH&S PDG meeting in Charlotte following a review of "Current Practices for Dry Cleaning and Dry Sanitizing – Survey Summary Report" presented by Elizabeth Grasso and Fred Cook. Effective Practices Discussions are intended to be relatively informal opportunities to share information and experiences on various sanitation challenges. "How to Dry Clean and Sanitize Using Steam" was one of the suggested topics. MOM Brands volunteered to lead the first discussion.

All members of the FH&S PDG were invited by meeting request to attend. Individuals who previously indicated interest in the topic were confirmed to be on the invitation list. Based on the number of beeps when starting the call approximately 30 – 40 people joined the discussion. No attendance acknowledgement was requested. The group was reminded that the discussion was not to share proprietary information. Also, no endorsements of particular products were to be expressed beyond those associated with specific use experience.

John introduced the topic of dry cleaning/sanitizing. Experiences with dry steam methods for different applications at MOM Brands were discussed. Then the discussion expanded with representatives of several companies sharing their experiences and opinions, both successful and less than satisfactory, depending on the types of soil, equipment and desired level of sanitation.

#### Some dry cleaning and dry sanitizing experiences using steam were shared and discussed:

Removal of allergens (soy, egg, peanut)

- One person reported steam was not effective for removing 100% of certain allergens from specific surfaces although visually clean.

Destruction of microorganisms

- Steam may not be reliable for a high level of microbial reduction in all cases, but can reduce APC levels significantly.

Mechanical grease

- Steam can be very effective for removing it.

#### Types of soils, surfaces and equipment use with steam were discussed:

Dry cereals

- Heavy soils can be difficult to remove using steam. Works well if most soil is previously removed using physical dry cleaning methods

Belts

- One steam system works very well for cleaning off pie filling from belt but does not clean framework.
- Other experiences with steam sanitizing for belts worked well.
- Addition of residual wetness from steam on fabric belts is a concern.

Electrical boxes

- One person shared the dry steam can be very effective inside and does not damage (turn power off first).

#### Motor housing

- One person reported steam can be very effective for inside hard to reach surfaces.

#### Bolt holes

- Steam can be very effective for cleaning and sanitizing (reduce APC) difficult-to reach threaded bolt holes.

#### Knives and blades for cutting packaging film.

- Steam can be very effective.

#### Scales

- Dry steam was very effective for eliminating Listeria.

#### Concrete floors

- Steam worked well for reducing Listeria in floor surface cracks

#### Experiences with types of steam systems discussed:

- Kleenjet 1000CV
- Amerivap with Houdini for belts
- Rea UltraVapor
- Examples of voltage requirements vary – 240, 440 or 575.

#### Some of the other discussion:

- Use of dry steam for cleaning and sanitizing can reduce moisture in the plant v.s. wet cleaning and wet sanitizing methods, which can reduce food safety risk. The moisture content of steam can vary. Some is very dry, about 6%. In some cases wetness can be produced from condensation which is easier to control on level surfaces compared to slanted surfaces on which moisture runs. One person suggested chasing steam treatment with an alcohol-based sanitizer spray might be helpful sometimes to help dry residual moisture from equipment surfaces or crevices.
- Steam seems to remove soils by displacement. High temperature helps (v.s. ambient temp pressurized air).
- Best to use deionized or distilled water for steam generation.
- Steam does not raise the temperature of equipment significantly so temperature is difficult to measure for validation studies.

#### Future Effective Practices Discussion

“Use of Ice Blasting and Other Particulates for Dry Sanitation” including use of baking soda, was suggested as the next Effective Practices Discussion topic, with about 7 people on the call expressing their interest.

Also, an update on “Use of Steam for Dry Cleaning and Dry Sanitizing” one year from now would be appropriate since further developments are expected.