

APPLIED FOOD SOLUTIONS

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A RECENT SUCCESS

Several meat and poultry processors have contacted AFS regarding the regulatory compliance challenge mentioned here. AFS has provided a “path to compliance” for more than one processor.

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KNOWLEDGE IS POWER

All businesses, industries, and organizations face challenges and problems from time-to-time. The difference is how they react to them. In 2019 meat and poultry processors that fully cook products have had a new challenge find them. As sometimes is the case this challenge is being initiated by regulators. The Food Safety and Inspection Service (FSIS) of the United States Department of Agriculture (USDA) regulates the meat and poultry industry. FSIS took many years of scientific research combined with the science and engineering behind the cooking process to create an updated requirement to enhance the safety of fully cooked meat and poultry.

The details of the enhancement were documented in a guidance document of approximately 35 pages updated in June 2017. This document is widely known as “Appendix A” (there is also an “Appendix B” for cooling) for cooking. FSIS also published its intent to apply “Updated Appendix A” to continuous cooking processes, or High Temperature Short Time (HTST) processes in FSIS vernacular. Appendix A previously had been applied only to batch cooking processes. The Updated Appendix A guidance has not applied to HTST in the past; in addition, the essence the legal definition of what is “fully cooked” now includes the conditions inside the cooking system. HTST cooking systems contain a mixture of air and water vapor at atmospheric pressure. The physical behavior of air/water vapor mixtures is defined by the science of Psychrometrics, which may or may not comfort industrial processors. Again, Appendix A prior to this year has applied to batch cooking systems only. Batch systems operate below 212°F, while continuous (HTST) systems generally operate above 212°F. The conditions in both

batch and continuous cooking systems affects surface conditions of product during cooking, which in turn affects lethality of Salmonella and other pathogenic bacteria during cooking, which is probably somewhere between unknown to unfamiliar to most processors. The answer may be in knowledge. Where do we go from here?

Approaches differ by organization. One approach is to gather with other stake holders to discuss the implications and discuss solutions. Some may call this gathering best practices; some might say misery loves company. For the meat and poultry industry dealing with this new challenge The Ohio State University (OSU) offers a short course in April: <https://meatsci.osu.edu/events/thermal-processing-ready-eat-meat-products-o> This course brings industry, regulatory, consulting, and academic research expertise on these new food safety challenges together to promote improved food safety. This is a great experience and networking opportunity.

What about general procedures to handle any challenge in any industry or organization? Continuous Improvement methods are designed to do just that. OSU offers another short course tailored to meat and poultry processors: <https://meatsci.osu.edu/events/introductory-process-control-short-course-meat-and-poultry-processors>

Would You Like to Know More?

What if you aren't a meat or poultry processor? In many organizations there are "gremlins," "ghosts", "alligators" and plain old problems that seem to reoccur at random. How do you handle these recurring problems? How they are handled can be part of what defines a "world class" organization. This represents an opportunity to distinguish you from your competition. Would you like to learn more? Do you have a gremlin, ghost, or alligator to tackle? Please contact AFS for answers.

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