## APPENDIX C

## EXAMPLES OF PREVENTIVE CONTROLS AND/OR CORRECTIVE ACTIONS FOR THE TOP TEN FOOD SAFETY PROBLEMS

**Contamination during processing.** Separation of production lines, use of physical detachments and lockouts, use of staging areas, routine maintenance of manufacturing equipment, and properly conducted, unbiased, third party audit of GMPs.

**Contamination of raw materials.** Supplier audits, raw material testing and verification, supplier training, pre-processing treatments (i.e., pasteurization, irradiation, washing, culling, etc.), documentation from suppliers certifying safety of materials, and properly conducted, unbiased, third-party audit of GMPs.

**Deficient employee training.** Provision of training specific to the employees' duties, bilingual training, provision of learning aids, such as newsletters, posters, and videos, seminars and employee reviews, evaluation of the effectiveness of training, training refresher courses, in-house training (versus consultants), and properly conducted, unbiased, third-party audit of GMPs.

**Difficult-to-clean equipment.** Environmental sampling, cleaning areas prone to niches, SSOPs, taking equipment apart to clean, addition of a kill-step at the end of processing (i.e., pasteurization, irradiation, etc.), and properly conducted, unbiased, third-party audit of GMPs.

**Incorrect labeling or packaging.** Institution of label review policies, removal of old label and packaging inventories from the manufacturing site, verification of labels by scanning barcodes, label audits, training and properly conducted, unbiased, third-party audit of GMPs.

**No preventive maintenance.** Preventive maintenance plan, documentation of repairs and servicing, and properly conducted, unbiased, third party audit of GMPs.

**Poor employee hygiene.** Use of sensor-equipped towel dispensers, keypad controls for hand washing, automated hand washing stations, and properly conducted, unbiased, third party audit of GMPs.

**Poor plant and equipment sanitation.** Keypad controls that keep track of hand washing, sensorequipped hand towels, pay incentives, beeping dispenser to ensure adequate hand-washing time, documentation of hygiene activities (i.e., logs), SSOPs, and properly conducted, unbiased, third-party audit of GMPs.

Poor plant design and construction. Properly conducted, unbiased, third party audit of GMPs.

**Post-process contamination at manufacturing plant.** Environmental sampling, inclusion of a kill-step at the end of processing (i.e., pasteurization, irradiation, etc.), use of preservatives, SSOPs, and properly conducted, unbiased, third-party audit of GMPs.