

Cleaning and Sanitizing Workshop Overview

FDA

PSA



VDACS

Dr. Laura K Strawn
AFDO Conference
June 2024

Extension

Description of C&S Workshop

- One day workshop focused on best practices of cleaning and sanitization required by the Produce Safety Rule (PSR)
- A brief overview of the PSR with guidance to understand current regulatory policies and requirements associated with cleaning and sanitizing for covered produce on farms
- Discussion topics will include food safety basics of packinghouses + how to develop cleaning and sanitization programs
- Opportunity to gain hands-on experience with reading C&S labels, C&S monitoring activities, developing and reviewing C&S records, developing C&S procedures, and handling C&S tools/equipment (plus more!)



Photo credit UVM



Topics Covered

- Food Safety Basics
 - Outbreaks related to lapses in C&S
- Produce Safety Rule Overview
 - Sanitation specific requirements
- Identification and Evaluation of Potential Hazards
- Cleaning
- Sanitizing
- Establishing a Cleaning and Sanitizing Program
 - Components

Cleaning and Sanitizing Workshop Agenda

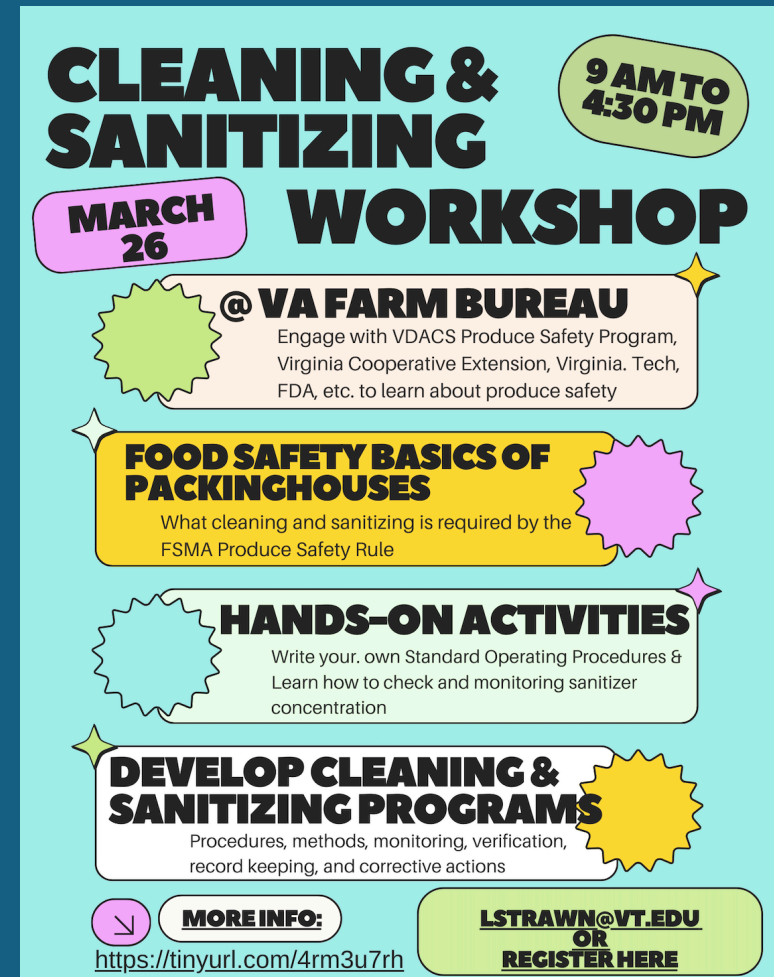
March 26th, 2024

VA Farm Bureau Building, 12580 West Creek Parkway, Richmond, VA 23238

| | |
|-----------------------|--|
| 9:00 AM | Registration and Coffee |
| 9:15 AM | Introductions Presented by Erik Bungo, VDACS |
| 9:30 AM - Module 1: | The PSR Delivered by Ben Marshall, FDA |
| 10:15 AM - Module 2: | Production & Packinghouse Food Safety Basics Delivered by Stuart Vermaak, VCE |
| 11:00 AM | Break |
| 11:15 AM - Module 3: | What is Cleaning and Sanitizing Delivered by Tommy Saunders, PSA |
| 12:00 PM - Module 4a: | Developing a Cleaning and Sanitizing Program: <i>Cleaning and sanitizing procedures and methods</i> Delivered by Laura Strawn and Alexis Hamilton, VT, VCE |
| 1:00 PM | Lunch (catered by Farm Bureau) |
| 2:00 PM - Module 4b: | Developing a Cleaning and Sanitizing Program: <i>Monitoring, verification, record keeping and corrective actions</i> Delivered by Laura Strawn and Alexis Hamilton, VT, VCE |
| 2:45 PM | What to Expect During Inspections Delivered by Erik Bungo & Produce Safety Program Team |
| 3:00 PM | Break |
| 3:15 PM | Begin Breakout Groups - 5 Stations <i>Hands-on activity stations including test strips and titrations (monitoring, verifying, etc.), record keeping, tools and hygienic design, writing an SOPs, and label hunt</i> |
| 4:15 PM | Questions, Review of Post Workshop Activities for your Operation, and Complete Evaluation |
| 4:30 PM | Adjourn |

Target Audience

- Farm personnel, with cleaning and sanitizing responsibilities involved in growing, harvesting, holding, or packing covered produce
- Supervisors and managers with food safety responsibilities
- Extension employees and educators
- Industry association representatives
- Regulatory agency representatives



CLEANING & SANITIZING WORKSHOP

9 AM TO 4:30 PM

MARCH 26

@ VA FARM BUREAU
Engage with VDACS Produce Safety Program, Virginia Cooperative Extension, Virginia Tech, FDA, etc. to learn about produce safety

FOOD SAFETY BASICS OF PACKINGHOUSES
What cleaning and sanitizing is required by the FSMA Produce Safety Rule

HANDS-ON ACTIVITIES
Write your own Standard Operating Procedures & Learn how to check and monitoring sanitizer concentration

DEVELOP CLEANING & SANITIZING PROGRAMS
Procedures, methods, monitoring, verification, record keeping, and corrective actions

MORE INFO:
<https://tinyurl.com/4rm3u7rh>

LSTRAWN@VT.EDU OR REGISTER HERE

C&S Participants Improved Knowledge

- Pre- and Post-Tests were provided to the 32 participants to assess knowledge gain (out of 16 questions)
- Pre-Test Score = 9.7 ± 0.4 (~61%)
- Post-Test Score = 14.2 ± 0.3 (~89%)
- Improvement Score = +4.5

Cleaning & Sanitizing Post-test

1. Which type of microorganism is generally controlled through a properly implemented cleaning and sanitation program because of their ability to multiply rapidly on a surface if given the right conditions?
 - ☐ Parasites
 - ☐ Bacteria
 - ☐ Viruses
 - ☐ All of the above
2. Which of the following is the correct way to implement the four-step cleaning and sanitizing process?
 - ☐ Remove debris, apply sanitizer, scrub surface, rinse
 - ☐ Remove debris, apply detergent, apply sanitizer, rinse
 - ☐ Remove debris, apply detergent, scrub surfaces, apply sanitizer
 - ☐ Remove debris, apply appropriate detergent and scrub, rinse, apply sanitizer
3. True or False: A systems thinking approach requires considering the different practices, programs, and procedures on the farm and how they work together to impact cleaning and sanitization.
 - ☐ True
 - ☐ False
4. Which of the following is true:
 - ☐ Wood is not an appropriate surface for use on the farm due to its absorbent characteristics.
 - ☐ A gloved hand is an example of a zone 2 surface.
 - ☐ Zone 1 surfaces are at the highest risk of cross-contamination due to their proximity to the produce and priority should be given to contamination prevention in this zone.
 - ☐ Using an effective sanitizer should eliminate the need for manual scrubbing.
5. To sanitize a surface is to _____.
 - ☐ Statistically destroy all living organisms.
 - ☐ Kill 100% of vegetative cells.
 - ☐ Reduce pathogens to a safe level
 - ☐ All of the above
 - ☐ None of the above
6. The role of a surfactant is to act as a:
 - ☐ Chelating agent, sequestering metal ions
 - ☐ Wetting and dispersing agent
 - ☐ Disinfectant and detergent



has 1,000,000 CFU on it,

Evaluations Supported Verbal Feedback of a Worthwhile Workshop (out of 5, n=32)



- Relevant to my Needs: 4.6 ± 0.3

- Up to Date = 4.8 ± 0.2

- Well Organized = 4.7 ± 0.2



- Appropriate Level: 4.6 ± 0.3

- Gained Knowledge, Skills, and Attitudes: 4.8 ± 0.1

- Use What I Learned in my Professional Responsibilities: 4.8 ± 0.2



Cleaning & Sanitizing Workshop Evaluation Form March 26, 2024

Please answer the following questions about this Workshop. Your feedback is very important so that Virginia Tech / Virginia Cooperative Extension may better serve you and others in the future. *Thank you!!*

1. Did the workshop meet your expectations? Yes | Partially | No | please describe your response.

2. Please rate the program, modules, and breakout.

| Program | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|-------------------|----------|---------|-------|----------------|
| Was relevant to my needs | 1 | 2 | 3 | 4 | 5 |
| Was based on up-to-date information | 1 | 2 | 3 | 4 | 5 |
| Was well organized | 1 | 2 | 3 | 4 | 5 |
| Was at the appropriate level | 1 | 2 | 3 | 4 | 5 |
| I gained knowledge/skills/attitudes about the topics presented | 1 | 2 | 3 | 4 | 5 |
| I will use what I learned in my professional responsibilities | 1 | 2 | 3 | 4 | 5 |
| Modules and Breakout | Poor | Fair | Neutral | Good | Excellent |
| Module 1: The PSR | 1 | 2 | 3 | 4 | 5 |
| Module 2: Production & Packinghouse food safety basics | 1 | 2 | 3 | 4 | 5 |
| Module 3: What is Cleaning and Sanitizing? | 1 | 2 | 3 | 4 | 5 |
| Module 4a: Developing a cleaning & sanitizing program: | 1 | 2 | 3 | 4 | 5 |
| Cleaning and sanitizing procedures and methods | | | | | |
| Module 4b: Developing a cleaning & sanitizing program: | 1 | 2 | 3 | 4 | 5 |
| Monitoring, verification, record keeping and corrective actions | | | | | |
| Breakout Session | 1 | 2 | 3 | 4 | 5 |

3. Describe a suggestion(s) that could improve the overall content, presentations, or breakout of the material covered?

4. How would you rate the facilities and the location?

Evaluations Supported Verbal Feedback of a Worthwhile Workshop (out of 5, n=32)



- The PSR: 4.8 ± 0.1

- Production and Packinghouse Food Safety Basics = 4.6 ± 0.3

- What is C&S? = 4.6 ± 0.4



- Developing C&S procedures and methods: 4.8 ± 0.2

- Developing C&S monitoring, verification, record keeping, and corrective actions: 4.7 ± 0.3



- Breakouts = 5.0 ± 0.0

Cleaning & Sanitizing Workshop
Evaluation Form
March 26, 2024

Please answer the following questions about this Workshop. Your feedback is very important so that Virginia Tech / Virginia Cooperative Extension may better serve you and others in the future. *Thank you!!*

1. Did the workshop meet your expectations? Yes | Partially | No | please describe your response.

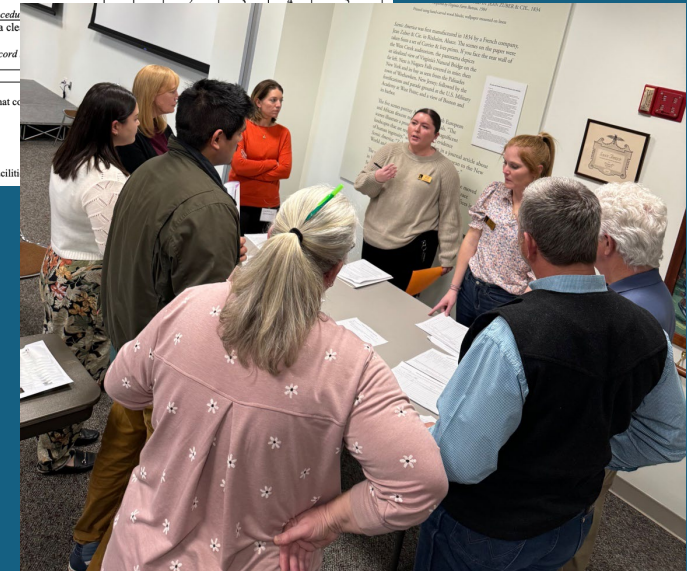
2. Please rate the program, modules, and breakout.

| Program | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|--|-------------------|----------|---------|-------|----------------|
| Was relevant to my needs | 1 | 2 | 3 | 4 | 5 |
| Was based on up-to-date information | 1 | 2 | 3 | 4 | 5 |
| Was well organized | 1 | 2 | 3 | 4 | 5 |
| Was at the appropriate level | 1 | 2 | 3 | 4 | 5 |
| I gained knowledge/skills/attitudes about the topics presented | 1 | 2 | 3 | 4 | 5 |
| I will use what I learned in my professional responsibilities | 1 | 2 | 3 | 4 | 5 |

| Modules and Breakout | Poor | Fair | Neutral | Good | Excellent |
|--|------|------|---------|------|-----------|
| Module 1: The PSR | 1 | 2 | 3 | 4 | 5 |
| Module 2: Production & Packinghouse food safety basics | 1 | 2 | 3 | 4 | 5 |
| Module 3: What is Cleaning and Sanitizing? | 1 | 2 | 3 | 4 | 5 |
| Module 4a: Developing a cleaning & sanitizing program | 1 | 2 | 3 | 4 | 5 |
| Module 4b: Developing a cleaning & sanitizing program | 1 | 2 | 3 | 4 | 5 |
| Monitoring, verification, record keeping, corrective actions | 1 | 2 | 3 | 4 | 5 |
| Breakout Session | 1 | 2 | 3 | 4 | 5 |

3. Describe a suggestion(s) that could improve the workshop.

4. How would you rate the facilitator?



Favorite Part of the C&S Workshop

- Favorite Part: Overwhelmingly the Breakout Activities!



STATION 4

Label Hunt Facilitator Questions:

- What is the EPA registration number?
- What page can you find the instructions for sanitizing surfaces like conveyors, stainless steel pack tables, buildings (walls, floors), or harvest bins?

For bin sanitation, let's answer the following questions:

- What ppm PAA is your target?
- What's the dosing per 25 gallons?
- What is the contact time?
- Does water need to be at a certain pH?
- Do you need to rinse?



Questions?



CONTACT INFO:
Dr. Laura K Strawn
Lstrawn@vt.edu



Certificate of Training

is awarded to

Rosemary Reese

In recognition for having successfully completed the 8 h course:
Cleaning and Sanitizing Produce Safety Workshop

March 26, 2024

Erik Bungo
Produce Safety Program Supervisor
Virginia Department of Agriculture and
Consumer Services (VDACS)

Laura Strawn
Associate Professor & Extension
Specialist, Produce Safety
Virginia Tech