Hello Produce Safety Alliance Members:

Our last newsletter of 2017 is upon us! Before we flip the calendar to 2018, there are a few more new resources to share and important information including the release of the Version 1.1 PSA Grower Training Manual and a recap of FDA announcements from 2017. This newsletter highlights a number of great resources to wrap up the year and support you with some new teaching tools and learning opportunities moving into 2018.

To begin, the entire PSA Team would like to thank our collaborators, PSA Trainers, Lead Trainers, Trainers-of-Trainers (ToTs), and produce growers for all of the hard work and dedication to improving the safety of the fruits and vegetables that feed our communities. Since September 2016, the PSA team, Trainers-of-Trainers, Lead Trainers, and Trainers have hosted a total of 563 Grower Trainings, 12 Integrated Trainings (Grower & Trainer Course in one), and 36 Train-the-Trainer Courses. The PSA could never have achieved this level of outreach and extension without collaboration. We look forward to 2018 and wish you and your families a very happy and healthy holiday season!

PSA Team (L to R): Gretchen Wall, Donna Pahl, Rob Way, Michele Humiston, Don Stoeckel, Kristin Woods, Betsy Bihn, and Connie Fisk
Since the launch of PSA Training Courses in September of 2016, the PSA has been diligently reviewing and evaluating all of our training materials to ensure their accuracy and utility. Through course participant comments, trainer feedback, and the scrutinizing eyes of the PSA and FDA staff, we have identified a few areas within the PSA Grower Training Manuals that were in need of corrections or edits. Many of the edits were typographical, and did not affect the overall content or learning objectives significantly. For this reason, AFDO will continue to approve courses conducted using either Version 1.0 or Version 1.1 of the PSA Grower Training Curriculum. Currently, the PSA does not have any future timeline for additional edits or versions of the manuals. If and when any updates occur to provisions within the FSMA Produce Safety Rule (e.g., agricultural water provisions), we will revisit the curriculum content to ensure its alignment with the regulation.

When ordering printed PSA Grower Training Manuals from the bookstore after December 11, 2017, you will receive Version 1.1. For PSA Trainers and Lead Trainers, a separate e-mail will be sent to you which includes the updated PowerPoints for Version 1.1 during the week of December 11, 2017. Currently, only the English manuals have been updated to V 1.1. The PSA is currently working to update the Spanish materials, but this is not yet complete. As with the English manuals, those using the Spanish materials can continue to use Version 1.0. A document cataloguing all of the changes that occurred between Version 1.0 and Version 1.1 is available in an easy to search Excel file, or in print.

Access the New Materials

- By ordering from our bookstore
- Self-printing

*PSA Trainers & Lead Trainers will be sent the updated PowerPoint presentations during the week of Dec. 11, 2017. Version 1.1 printed manuals can be purchased through the bookstore or printed using the electronic release files.

PSA Curriculum Changes from V 1.0 to V 1.1:

- Excel file
- Printable PDF

If you have any questions about the new materials, please contact Gretchen Wall (glw53@cornell.edu) or Michele Humiston (mmc15@cornell.edu).

NOTICE: Holiday Shipping Schedule

Plan for the holiday break now if you need manuals for trainings scheduled shortly after the New Year!

Orders for Grower and Train-the-Trainer Manuals placed after December 20, 2017 will be shipped on January 3, 2018 in observance of the Christmas and New Years Holidays at Cornell.

Order Manuals Here
**New Educational Resources**

"Name that Zone" Activity (PowerPoint & Printable Photos)
In the PSA curriculum, the concept of zones is used to help growers identify areas that are food contact surfaces (Zone 1), next to food contact surfaces (Zone 2), in the processing area but not Zone 1 or 2 (Zone 3), and outside the processing area (Zone 4). The FSMA Produce Safety Rule does not address the concept of zones, but rather states that food contact surfaces must be maintained, cleaned, and when necessary and appropriate, sanitized. Non-food contact surfaces must be maintained and cleaned. This tool helps reinforce how to identify these areas and begin to develop a sanitation program to meet regulatory expectations. This optional activity is designed for use during or after Module 6: Postharvest Handling & Sanitation is delivered at a training. The PowerPoint includes teaching and discussion notes for each one of the photos.

- PowerPoint
- Printable Photos

Supplemental Slides for Agricultural Water (PowerPoint)
This optional PowerPoint includes a few slides that review the latest FDA announcements regarding the provisions in Subpart E that relate to agricultural water. This includes the proposed extension of compliance dates for Subpart E and equivalent water testing methodologies. It also includes suggestions for what growers should do in the meantime since many growers have asked during training courses. These suggestions are not from FDA, but meant as GAPs to help growers better understand and manage their agricultural water use. The slides are designed for use in Module 5 - Agricultural Water, but are not included in the printed V 1.0 or V 1.1 manuals. Consider printing these slides or providing a PDF for your audience if you plan to deliver them.

- PowerPoint

"Is this agricultural water?" Activity (PowerPoint)
This optional PowerPoint was developed to highlight the definition of 'agricultural water', and frame it in the context of on-farm water use. These supplemental slides are best used at the beginning of Module 5.1 - Production Water. Understanding the definition of 'agricultural water' and 'covered produce' as defined in § 112.3(c), are critical to understanding the scope of what is covered under these criteria. Water that does not meet the definition of agricultural water is not covered by water quality criteria in the FSMA Produce Safety Rule. The PowerPoint includes teaching and discussion notes for delivery during a PSA Grower Training.

- PowerPoint

**Connecting with Trainings & Trainers**

Looking for training opportunities or additional trainers to add to your teaching team? We keep our website up-to-date with all of the latest course offerings and available trainers. Check our website frequently for new course postings.

**PSA Grower & Train-the-Trainer Course Schedule**
Not sure how to tell whether an advertised course is registered with AFDO and will result in the PSA/AFDO Certificate of Course Completion for course attendees? Read more about what to expect and how to find the right course [here](#).
Find a PSA Trainer or PSA Lead Trainer!
The PSA has launched a new and improved Trainer Directory, searchable by state, country, languages spoken, and trainer type. The trainers listed in our directory have agreed to be listed publicly on our website and their trainer status has been verified by the PSA.

For current PSA Trainers, Lead Trainers, and ToTs, you can update your contact information at any time using the "Update My Entry" form below the directory page. If you have attended a PSA Train-the-Trainer Course and are not currently listed in the Trainer Directory, you can also request to be added. We only post the names of individuals who allow us to post their contact information through the original PSA Trainer Application filled out when attending a PSA Train-the-Trainer Course.

PSA to Host Upcoming Water Summit

The PSA team is working to confirm a final location for the Water Summit announced by FDA Commissioner, Scott Gottlieb, M.D. (See more updates about this presentation online). Currently, the two-day Water Summit will be held sometime during the week of February 26, 2018, with Feb. 27-28, 2018 as the target dates. We anticipate releasing a formal Save-the-Date announcement before the end of 2017 and are working with FDA, NASDA, and other stakeholders to develop an agenda and other meeting details.

FDA Updates & Announcements

December 6, 2017
The Produce Safety Network: Supporting Regulators and Growers Across the Country
Shortly after the Produce Safety Rule became final in 2015, the FDA began building the Produce Safety Network (PSN) to support the efforts of farmers, state regulators, and other key stakeholders to implement the rule. Read more about the network through this interview and Q & A with Stephen Hughes, M.S., the PSN's team lead of produce safety experts from the Center for Food Safety and Applied Nutrition (CFSAN), and Brittany Laymon, M.S., Lieutenant Commander in the U.S. Public Health Service (USPHS), who is one of two Branch Chiefs leading the specialized investigators from the Office of Regulatory Affairs (ORA).

In case you missed these earlier announcements from 2017....

September 11, 2017
Equivalent Testing Methodologies for Agricultural Water

FDA has determined that the following methods are "scientifically valid" and "at least equivalent to the method of analysis in § 112.151(a) in accuracy, precision, and sensitivity".

The methods that FDA recently considered equivalent to modified mTEC agar (EPA Method 1603) are all on the list of EPA approved methods for monitoring recreational water for generic E. coli, but some methods on the EPA list are not considered equivalent by FDA.
The list of equivalent methods are summarized below, including how they are commonly referenced by the labs that conduct the analysis.

Membrane filtration methods:
- mTEC agar (EPA method 1103.1, Standard methods 9213D, & ASTM 5392-9)
- MI agar (EPA method 1604)
- mENDO/NA-MUG agar (Standard methods 9222B followed by 9222G)
- mColiBlue 24 agar (Hach method 10029)

Most probable number methods:
- Colilert (Idexx method, using Quantitray 2000)
- Colilert 18 (Idexx method, using Quantitray 2000)

Additionally, the Center for Produce Safety issued their final report on the Agricultural Water Testing Methods Colloquium that includes more information about water testing methods.

September 12, 2017
Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption; Extension of Compliance Dates for Subpart E

The FDA issued a proposed rule that, if finalized, would extend the compliance dates for the agricultural water requirements by an additional two to four years (for produce other than sprouts). The proposed extension will give the agency time to take another look at the water standards to ensure that they are feasible for farmers in all regions of the country, while protecting public health. The new agricultural water compliance date the FDA is proposing for the largest farms is January 26, 2022. Small farms and very small farms would have until January 26, 2023 and January 26, 2024, respectively. The proposed rule was open for public comment for 60 days and closed on November 13, 2017.

Table 2.--Proposed Compliance Dates for Requirements in Subpart E for Covered Activities Involving Covered Produce (Except Sprouts Subject to Subpart M)
Size of Covered Farm Proposed Time Periods Starting from the Effective date of the November 27, 2015, Produce Safety Final Rule (January 26, 2016)

<table>
<thead>
<tr>
<th>Business Size</th>
<th>Compliance Period</th>
<th>Compliance Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Small Businesses</td>
<td>8 years</td>
<td>January 26, 2024</td>
</tr>
<tr>
<td>Small Businesses</td>
<td>7 years</td>
<td>January 26, 2023</td>
</tr>
<tr>
<td>All Other Businesses</td>
<td>6 years</td>
<td>January 26, 2022</td>
</tr>
</tbody>
</table>

September 12, 2017
FDA Commissioner Addresses State Agriculture Commissioners; Announces New Steps to Enhance Collaboration with States and Ensure Farmers Are Prepared for FSMA

At a speech in New Orleans at the annual conference of the National Association of State Departments of Agriculture (NASDA), FDA Commissioner Scott Gottlieb, M.D., outlined a number of immediate next steps in a comprehensive approach to ensuring successful implementation of the Produce Safety Rule established by the FDA Food Safety Modernization Act (FSMA). During the conference, he discussed FDA's approach to agricultural water challenges including an extension of agricultural water compliance dates, stakeholder engagement on agricultural water standards, and equivalent water testing.
methods. In addition, produce farm inspections and training opportunities for producers and regulators were discussed as part of the comprehensive plan.

Collaborative Food Safety Forum - Workshop: Potential Options for Revising the Agricultural Water Standard and Testing Protocols

On October 3, 2017, representatives from the Food and Drug Administration (FDA), the U.S. Department of Agriculture (USDA), the U.S. Environmental Protection Agency (EPA), Centers for Disease Control and Prevention (CDC), Produce Safety Alliance, farms, academia, and food industry trade associations discussed potential revisions to the FDA Food Safety Modernization Act (FSMA) Produce Safety Rule’s (PSR) microbial quality standards and testing requirements for agricultural water. Discussion included proposals for how to amend the agriculture water requirements within the rule’s current framework to address near-term challenges, as well as ideas for novel frameworks that could improve the confidence in and measurability of the rule’s public health impact long-term as new science becomes available.

Read the meeting summary here.

Produce Safety Job Opportunities

Utah State University Extension invites applications for a faculty position as a Professional Practice Extension Assistant Professor. This is a full-time, non-tenure track, 12 month appointment. The successful candidate will work closely with Extension specialists, county agriculture Extension faculty, and the Produce Safety Coordinator from the Utah Department of Agriculture and Food to provide technical information and trainings related to the FDA Food Safety Modernization Act Produce Safety Rule. This position is funded as part of a 4-year contract with the Utah Department of Agriculture and Food and is subject to annual renewal of funds, contingent on continuing federal appropriations and completion of yearly contractual objectives. Funding is anticipated through June 30, 2021. This position will be housed in the Department of Nutrition, Dietetics and Food Sciences on the main USU campus in Logan, Utah.

For additional details and to apply, click here.

The Louis Pasteur Lecturer in Food Science

The Department of Food Science in Cornell University's College of Agriculture and Life Sciences invites applications for the position of The Louis Pasteur Lecturer in Food Science. This position is supported by the Louis Pasteur endowment fund.

The successful candidate will be expected to:
1. Teach or co-teach two food science courses per semester including food microbiology
laboratory, food analysis laboratory, and other food science courses appropriate with expertise. Specific teaching assignments will continue to evolve with programmatic needs.

2. Serve as an academic advisor for undergraduate students.

3. Manage the operation, maintenance, and staff of the teaching laboratories.

4. Contribute to ongoing departmental initiatives related to student recruiting, new student orientation, curriculum development, and the IFT curriculum approval process.

**Required Qualifications:**
Ph.D. degree in food science, food microbiology or a closely related field; strong expertise in food microbiology and food chemistry; undergraduate teaching and advising experience; excellent communication (verbal and writing) skills; passion for undergraduate teaching and advising.

**Preferred Qualifications:**
Formal degree/training in food science; experience in the food industry, team/project advising.

Submit application materials to: https://academicjobsonline.org/ajo/jobs/9600/apply

A complete application will include a cover letter; Curriculum Vitae; a concise statement of interest (including a description of teaching philosophy and prior teaching experience); full academic transcripts; and the names and contact information for three individuals who could provide letters of reference. Direct any questions regarding the application process to Sarah Lincoln, (sjl38@cornell.edu, 607-255-7900). Please direct any questions or requests for additional information regarding the position to Dr. Dennis Miller (ddm2@cornell.edu, 607-255-2895). Review of applications will begin Sept 30, 2017 and continue until the position is filled.

**Stay in Touch!**

Our general listserv reaches over 3,500 growers, industry members, regulatory agents, and educators in the United States and around the globe. Signing up for the listserv is the best way to stay in touch with the PSA. To sign up, please visit our website at producesafetyalliance.cornell.edu or use the link included at the bottom of this e-mail message.

As always, please do not hesitate to contact us if you have any questions, comments, or ideas. We love feedback, so let us know! Good, bad, or otherwise - our ears (and e-mail inboxes) are always open!