Introduction

The mission of the Produce Safety Alliance (PSA) is to develop a national Good Agricultural Practices [GAPs] education and training outreach program for farmers, packers, government and academic stakeholders to improve on-farm food safety practices and foster compliance with the anticipated U. S. Food and Drug Administration (FDA) fresh produce regulation. To advance this effort, PSA has established 10 workgroups which have been assigned specific tasks necessary to complete this mission. Their overarching goal is to actively engage in the development of a national GAPs education curriculum and training program that is focused on understanding and implementing fresh fruit and vegetable food safety best practices. The specific tasks for the ten workgroups are focused on specific aspects of produce safety ranging from fresh produce best practices for production, harvest and postharvest handling operations to certification related activities.

Workgroup #10 is tasked with the certification related activities. There exist two primary tasks for this workgroup for which this report is written. These two tasks are:

1] Recommend a Program Certification for PSA Training
2] Recommend a Process for Issuing Certificates and Maintaining Records

Working Committee Chairs

Joseph Corby
Executive Director, Association of Food and Drug Officials

Janet Williams
Consumer Safety Officer, Food and Drug Administration, Division of Human Resource Development (FDA/ORA/ORM/DHRD)

Meetings Held

<table>
<thead>
<tr>
<th>Date</th>
<th>Attendance</th>
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<tbody>
<tr>
<td>August 17, 2011</td>
<td>8</td>
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<tr>
<td>October 27, 2011</td>
<td>12</td>
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<td>November 4, 2011</td>
<td>10</td>
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<td>November 28, 2011</td>
<td>10</td>
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<td>January 12, 2012</td>
<td>12</td>
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<td>February 1, 2012</td>
<td>8</td>
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Total Meetings: 6
Total committee members¹: 39

¹ See Appendix I for full list of members
Data Collection

Information from committee members was collected during four teleconferences held in the months of August to November of 2011. Each meeting held was approximately one hour long where detailed notes were taken and submitted to the committee for review. From the notes taken during the teleconferences, a summary of working committee discussions was created by the PSA facilitators and committee co-chairs. Recommendations to the PSA Executive Committee were then drafted based on the summary of discussions held (See Recommendations Section, Page 9).

This working committee will continue to discuss topics related to certification after the FDA’s promulgation of the Produce Safety Rule in early 2012.
Summary

I. Program Certification for PSA Training

First and foremost, the Workgroup suggested caution about the use of the words “certified” or “certification” as these words are not always understood very clearly, and they may have many different meanings. It is well understood that a training program which is identified as being “certified” will have undergone a rather extensive accreditation process. For the purpose of this Alliance, the Workgroup supports the development of standardized training courses that will be recognized by both industry and regulatory agencies and which can be delivered by recognized trainers throughout the country. Individuals who attend PSA training programs should be provided a certificate indicating they have attended and successfully completed this recognized training, but this should not imply they are “certified” or have undergone “certification”.

The Workgroup believes that PSA must first develop and deliver a Train the Trainer Course that can create a large cadre of approved trainers. These approved trainers would deliver a Standardized, yet flexible, On Farm Food Safety and GAPs curriculum course designed to meet curriculum development standards throughout the country. Both of these courses should include a “demonstration of knowledge” component in the training program. This demonstration of knowledge may involve testing or other identified and developed measurable metrics to demonstrate an individual has gained knowledge for understanding and/or implementing best practices into the safe growing, harvesting, and packing of fresh fruits and vegetables.

An issue that complicates Workgroup efforts is that a produce safety regulation has yet to be promulgated, so we can only speculate what it may contain. The Seafood HACCP Alliance was formed at least a full year before the FDA Fishery Products rule was enacted and that proved to be very useful in preparing industry and regulators for the anticipated rule. The assumption is that there will be an education/training component in the Produce Safety rule as there is for a host of other regulated commodities so the work of the workgroup will not be in vain.

II. Challenges to Implementation of Recognized Curriculum

There are on-farm challenges and other barriers which need to be addressed in the curriculum. They include the following:

1] Course Availability – By utilizing a Train the Trainer model and allowing many training entities to conduct standardized training, a multitude of courses should be available. Training entities such as government, industry trade associations, Cooperative Extension agents, colleges, and consultants could be utilized to maximize the training effort.
2] **Cost of Attendance** – This could be a huge barrier particularly for small growers. Program costs including certificate fees will vary greatly, and PSA must assure cost effective options are available.

3] **Specific Audiences** – There may be specific needs for some individuals that desire training such as Amish farmers and certain ethnic groups. These needs must be addressed by the PSA standardized training curriculum. Government regulators may need specialized training to conduct regulatory inspections, and growers/producers may require crop specific training in certain areas.

4] **Issuance of Certificates** – Determining which entity or entities would be the best fit for issuing certificates for individuals who successfully completed training courses would need to be resolved.

To address these issues, the Workgroup discussed some of the current training programs that might be modeled. Four models were identified and protocols for these certificate issuing bodies were collected and submitted to the Workgroup for review.

Four models chosen for review include the following and described further in Section IV:

1] International HACCP Alliance
2] Seafood HACCP Alliance
3] National Restaurant Association’s ServSafe program
4] International Food Protection Training Institute [IFPTI]

The Workgroup believed that since the PSA will be addressing training for a very unique community, these certificate issuing bodies may not be ideal entities to issue certificates.

**III. Who Will Be Issued Certificates of Course Completion**

The Workgroup agreed that certificates should be issued to individuals and not be issued for food safety plans. It is anticipated that the new Produce Safety Rule will require food safety plans for growers and packers, and that trained individuals will need to implement and administer the food safety plans. We agreed to deal with the matter of certificates for individuals only. For growers and packers, it was suggested that individuals who developed the food safety plan should take a basic training program. Also, key farm managers connected to an operation should take the basic course as well. No individuals, however, should be excluded from the training, especially any small farmers that are exempted from the regulations [Tester Amendment]. Other entities, such as retail food establishments might also be interested in attending the courses even though they will not be required to attend. All individuals attending and successfully completing a PSA training program should be provided a certificate of attendance and course completion. The following individuals may be required to have a certificate verifying they have successfully completed training:

1] **Trainers** – Individuals who have attended and successfully completed a PSA Train the Trainer Course so they may conduct PSA training programs.
2] **Regulators** – Officials who will inspect growers and packers.

3] **Growers** – This could be an owner, someone with oversight to an operation, or a person responsible for the development or implementation of a food safety plan.

4] **Other Individuals** – These include key farm managers and packing shed managers.

Another issue discussed is whether government regulatory officials should be trained at the same time as individuals from industry and farm operations. There were a number of varying views on this matter that include the following:

1] Growers and packers have not been traditionally regulated for food safety by government agencies like other industries, and there may be some reluctance by some to be trained together.

2] Individuals may be less likely to speak freely if they are in the same trainings.

3] Concern was raised about how to ensure equal training and exposure to the same science should there be separate training.

4] Regulators may benefit from an exposure to farm practices and challenges from the farmer’s perspective because they may not have this experience and conversely, farmers may develop a comfort level with regulators by attending joint training.

5] There may need to be specific modules developed that are tailored to each commodity group.

6] It is envisioned that a specific and additional “Regulator” training will be needed but this may be more of an issue for FDA and not the PSA.

7] Regulatory programs will need to verify they have a trained equivalent staff in order to meet regulatory program standards. To meet these regulatory standards, regulatory agencies may wish to have their own training programs.

Other training thoughts discussed included the following:

1] Growers need to know basic food safety terminology

2] Auditors need to be trained with farmers

3] Training must be cost effective

4] The training content must be uniform, consistent, and standardized but flexible

5] A standard set of training materials must be developed and made easily available

6] Standardized training curriculum must meet national recognized training standards to include course objectives, learning outcomes etc.

**IV. Review of Current Models**

The Workgroup reviewed the protocols for issuing certificates by the following entities:

See Appendix II for Links to Model Certificate Programs

1] International HACCP Alliance
2] Seafood HACCP Alliance
3] National Restaurant Association ServSafe Program
4] International Food Protection Training Institute

The **International HACCP Alliance** was developed in 1994 to provide a uniform program to assure safer meat and poultry products. It is housed within the Department of Animal Science at Texas A&M University. The Alliance has five standardized programs that they administer. Programs are ANSI accredited and entities can become approved to deliver these courses. An initial application fee of $150, a $100 renewal fee every three years, and $10 per person certificate fee are the charges to be assumed. The Alliance designates a review committee to evaluate course content and knowledge domain. The Alliance also maintains records which can be made available to regulatory agencies.

The **Seafood HACCP Alliance** was initiated by the Association of Food and Drug Officials (AFDO) and their regional affiliate of Southern States (AFDOSS) in conjunction with a cadre of Sea Grant Seafood Specialists which originally assisted the National Fisheries Institute (NFI) with their initial HACCP training programs. They developed a uniform national HACCP education, training, and technical assistance program for the seafood industry and federal, state and local food inspectors. They have six standardized training programs that are administered by AFDO. Course applications are submitted to AFDO and course content and trainer qualifications are evaluated for approval. There is a $35/person certificate fee and course material cost $50/person. All records are maintained by AFDO.

The **National Restaurant Association** administers the ServSafe program for food handlers. This Association has a multitude of training programs available. Some of their programs are state specific to deal with some of the non-uniformity in rules that exist. Training for managers, food handlers, and trainers are available on-line or face to face. Costs vary greatly and range from $50 - $1100. Examinations are generally taken on-line but proctored by a sponsoring company or by National Restaurant Association representatives. Certificates are mailed to students.

The **International Food Protection Training Institute [IFPTI]** was recently awarded a grant with FDA to pilot a project focused on coordinating the efforts for training regulatory officials and serve as a registrar for approved course training. They have recently developed a Learning Management System [LMS] for the purpose of tracking and recording training to be delivered in effort to advance a more integrated food safety system. Only approved trainers will be permitted to submit the names of individuals that were trained into the LMS for a fee of $10/person. This system is still being developed at this time.

The Workgroup recognizes that there are other models that exist at universities and colleges throughout the country as well.
V. Process for Issuing Certificates and Maintaining Records

While any of these models or entities could provide a satisfactory administrative component for PSA training programs, the Workgroup believed that PSA should oversee and administer training activities. This may be a problem should continued funding for the PSA be eliminated. The Workgroup supports an alignment with other training entities where the PSA can serve as the administrative hub for course review, course application, course approval, and the issuance of certificates. In addition, only PSA approved trainers should submit for course review and/or approval, and they must supervise the delivery of any PSA training program. The process for issuing certificates should be similar to the models reviewed and might proceed as follows:

1] Approved trainers submit an application to PSA to conduct a PSA training course.
2] The PSA Steering Committee or designated approval committee reviews the application for content and assures that approved trainer[s] are providing proper training, and the course meets the approved standardized curriculum.
3] Approval is granted to conduct the course and PSA forwards course and record documents such as a Course Attendance sheet and Trainee Information sheet to the approved trainer.
4] The approved trainer returns the required documents back to PSA who forwards certificates to trainees who successfully completed the training program.
5] PSA maintains records of course and issued certificates. These are made available to regulatory agencies upon request.

Additionally, this process may be preceded by a request to review an existing course (developed prior to the formation of the PSA) which would be reviewed by the PSA for compliance with its standardized curriculum.
Recommendations

RECOMMENDATION #1 – The Produce Safety Alliance should develop standardized produce safety programs for all stakeholders. A Standardized On Farm Food Safety and GAPs curriculum course and a Train the Trainer Course should first be developed from well-established Good Agricultural Practices [GAPs] training programs and then be updated to include elements of the new Produce Safety rule. Additional specialized modules for certain commodities and audiences must be considered as well.

RECOMMENDATION #2 - Individuals who attend Produce Safety Alliance training programs should be issued a Certificate indicating they have successfully completed the training.

RECOMMENDATION #3 - The standardized Train the Trainer Course and Standardized On Farm Food Safety and GAPs curriculum course should include a demonstration of knowledge component that indicates the trainee has acquired the necessary food safety skills and knowledge relating to the safe growing, harvesting, and packing of fresh fruits and vegetables. This demonstration of knowledge should be measurable and could be the passing of a test, satisfactory completion of an exercise, or both options.

RECOMMENDATION #4 – The Train the Trainer Course and Standardized On Farm Food Safety and GAPs curriculum course should be open for attendance to all interested individuals. Additional specific training [i.e. regulator training, basic farming practices in relation to food safety] should be presented as needed to specific groups only.

RECOMMENDATION #5 – The Produce Safety Alliance should align themselves with other entities that could have approved trainers deliver Produce Safety Alliance training programs in order to maximize the amount of training to be delivered.

RECOMMENDATION #6 – Only approved trainers who have successfully completed the Produce Safety Alliance Train the Trainer Course may make application to the Produce Safety Alliance to conduct a Produce Safety Alliance training program. The application should be submitted on forms approved by the Produce Safety Alliance, and the program must be approved by the Produce Safety Alliance Executive Committee or an approval board designated by the Produce Safety Alliance Steering Committee.

RECOMMENDATION #7 – The Produce Safety Alliance should administer all Produce Safety Alliance training programs and keep records of all courses and all certificates. A list of all approved training programs should be posted on the Produce Safety Alliance website.

RECOMMENDATION #8 – The Produce Safety Alliance must assure there is flexibility in all the training to be delivered so that issues relating to cost, ethnic diversity, specialized training, and course availability are fairly addressed. Expansion of Produce Safety Alliance membership,
continued outreach, and expansion of training efforts out to recognized entities are activities that should be considered.

RECOMMENDATION #9 – The Produce Safety Alliance should establish a review system whereby other existing courses which meet equivalent program content can be recognized as an acceptable alternative to Produce Safety Alliance training courses.
APPENDIX I: Working Committee Members (39)

Aller, Marion; Deputy Commissioner; Florida Department of Agriculture
Bihn, Elizabeth; Produce Safety Alliance Director; Cornell University
Broughton, Fred; Marketing Specialist; South Carolina Department of Agriculture
Brooks, Scott; Director, Quality Assurance; YUM! Brands, Inc.
Brown, Reggie; Association Manager; Florida Tomato Exchange
Corby, Joseph; Executive Director; Association of Food and Drug Officials
D’lima, Carol; Produce Safety Staff Fellow; FDA-CFSAN
Dougherty, Jennifer; Audit programs coordinator; USDA-AMS
Ducharme, Diane; Educator; North Carolina State University
Giclas, Hank; Senior Vice President; Western Growers
Gregory, Laura; Grower Communications; California Strawberry Commission
Hari, Michael; Auditor/Inspector; Equicert
Haskins, Cynthia; Consultant; Illinois Farm Bureau
Hirsch, Diane; Extension Educator; University of Connecticut Cooperative Extension
Johnson, Gordon; Extension Vegetable Specialist; University of Delaware
Johnson, Donna; DLJ Food Consulting; Owner
Kiger, Luana; Special Assistant to STC; USDA NRCS
Kimes, Ken; Farmer; Greensward/New Natives, LLC
Kline, Wesley; Agricultural Agent; Rutgers Cooperative Extension
Kulhanek, Ashley; Food Safety Education Associate; The Ohio State University
Lu, Jianbo; Director of Food Safety; Global Food Safety Forum
Lynch, Jane; Certification Representative; Organic Certifiers, Inc.
McGinnis, Yvonne; CEO; Remembering Mary, LLC
McSwane, David; Professor; Indiana University
Nieto-Montenegro, Sergio; President; Hispanic Workforce Management, LLC
Nolte, Kurt; Extension Agent; University of Arizona
Normandin, Vicki; Ag Consultant; Self
Phelps, Laura; President; American Mushroom Institute
Rushing, Jim; Training and Program Manager; University of Maryland
Salas Gutierrez, Sonia E.; Science/Technology Manager; Western Growers Association
Sanchez, Marcos; Food Safety Specialist; IICA
Scott, Vicki; Director of Quality; Amigo Farms
Sharp, Adam; Public Policy; Ohio Farm Bureau Federation
Smith, Michelle; Senior Policy Analyst; USFDA
Sitch, Stephen; Director; NY State Dept. of Agriculture and Markets
Tocco, Phil; Extension Educator; Michigan State University Extension
Wall, Gretchen; Produce Safety Alliance Coordinator, Cornell University
Williams, Janet; Consumer Safety Officer; Food and Drug Administration
Yoder, Bennie; Rep. for Food Safety/Grower; Sunset View
Yudin, Richard; Technical Manager; Fyffes
Zambrana, Ingrid; National Expert-Foods; USFDA/Office of Regulatory Affairs
APPENDIX II

Resources for Certification Models

1] International HACCP Alliance
http://www.haccpalliance.org/sub/index.html

2] Seafood HACCP Alliance
http://seafood.ucdavis.edu/haccpalliance.html

3] National Restaurant Association ServSafe Program
http://www.servsafe.com/

4] International Food Protection Training Institute
http://www.ifpti.org/