Certifying Orchard Best Management Practices: How, When and Why?

December 10, 2015
Speakers

Bryce Spycher, Almond Board (Moderator)

Mike Villaneva, California Leafy Greens Marketing Agreement

Camron King, LWWGA

Rebecca Anderson, SGS Global
Mike Villaneva, California Leafy Greens Marketing Agreement
A Model for Producing Safe Food by Establishing a Culture of Food Safety on the Farm
1 in 6 Americans get sick from foodborne illness each year.
September 2006
Killer bacteria hunted in fields of California

Outbreak of E. coli contamination in spinach sends investigators to ‘America’s Salad Bowl’

By Dan Vergano and Judy Riven
USA TODAY

Eating our spinach

Per capita spinach consumption in the USA:

1
2
3
4

Due to the spinach recall, we are out of all spinach until further notice. We will share what we know as we continue to get information.
205 Illnesses
4 deaths
26 states and Canada

E. Coli 0157:H7
50% Hospitalization
15% HUS (31 cases)
How to Respond?
Mandatory Government Oversight
Industry Funded

$.0115 per 24-count carton
Handler-Based

Sanitation Services
Custom Service Providers
Harvesters
Growers
Water Suppliers

HANDLERS
Diverse Farms And Practices
Food Safety Practices (aka metrics)

- Science-Based
- Developed by Experts
- Updated W/New Info
- Align with FSMA
Focus Areas of the Food Safety Practices
1. GENERAL REQUIREMENTS

- Compliance plan
- Grower list
- Recall plan
2. WATER

- Regular testing of all water sources
- Quality standard
- Sanitary survey
3. SOIL AMENDMENTS

- Verification of process/treatment
- Application intervals
- Pathogen testing
4. ENVIROMENT

Risk Assessments
• Pre-season
• Pre-harvest
• Daily harvest
5. WORKER PRACTICES

- SOPs
- Worker health/hygiene
- Field sanitary facilities
6. FIELD SANITATION

- SOPs/SSOPs
- Cleaning/sanitizing equipment
- Employee/visitor policy
Government Oversight and Audits

• USDA-Licensed
• CDFA Auditors
Why USDA?

- Government
- Independent
- Transparent
- Experienced
LGMA On-Farm Audits

Scheduled Audits

• 24 - 48 Hour Notice

• Full Audit (200+ checkpoints)

• Approximately Every 2 months (when in season)
LGMA On-Farm Audits

Unannounced Audits

- No Notice
- Focus on Field Practices
- Shorter Checklist
  (80+ checkpoints)
Handler Audit Schedules

• Average five audits per year
• Four scheduled
• One unannounced
• Two harvest crews per field per audit
• All growers audited at least once annually
Systems Approach

• Verifies that handlers have the entire program in place
• Handlers responsible for ensuring growers comply
• Only handlers are certified
LGMA Service Mark

- Used on Bills of Lading
- Not used on packaging
- Not intended to promote food safety
Audit Results
The Future: Challenges and Opportunities
First Update of Federal Food Safety Laws in 70 Years - FDA
LGMA Objectives

• Align with FSMA
• Partner with FDA on verification of compliance
• Avoid another layer of government
• Streamline marketplace requirements
LGMA TECH

Food Safety Training for the Leafy Greens Industry
# Education and Continuous Improvement

## Courses Offered

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train The Trainer</td>
<td></td>
</tr>
<tr>
<td>Managing Harvesting Operations &amp; Personnel</td>
<td></td>
</tr>
<tr>
<td>Managing Animal Intrusions</td>
<td></td>
</tr>
<tr>
<td>Sampling &amp; Testing Procedures</td>
<td></td>
</tr>
<tr>
<td>Employee Health &amp; Hygiene</td>
<td></td>
</tr>
<tr>
<td>Cleaning &amp; Sanitizing Harvesting Equipment</td>
<td></td>
</tr>
</tbody>
</table>
Research and New Science
LGMA Certification

Since 2007:

• 8 Years of operation
• Over 4,500 Farm Audits
• Mandatory Compliance
• Penalties/Decertifications
Thank You!
Camron King,
LWWGA
Rebecca Anderson,
SGS Global Services
Food Safety Certification

Rebecca Anderson
Scheme Manager, Food Safety
SCS Global Services
Topics Covered

Introduction to SCS
Trends – Consumer Demand, FSMA, GFSI
Checklist Requirements, Risk Assessments
Meeting Audit Expectations
About SCS Global Services

Global Certification Body offering:

- HACCP (IHA Accredited)
- GLOBALG.A.P. – Option 1 & 2
- HPSS
- PrimusGFS & IFS
- SQF and BRC
- Harmonized GAP and GMPs
- USDA Organic
- Sustainably Grown
- Fair Trade USA
- TNC – Tesco Nurture
- EFI – Equitable Food Initiative
Trends

Consumer Demands & Government Regulations
Food Industry Trends align with Consumer Wants

“Consumers are looking beyond food products to the way a company conducts business and impacts its environment, society, and the world as a whole.”

• Sustainability & Reducing Impact
• Social Responsibility
• Technology
  – Online systems & software
  – Insta-access
• Emphasis on Local Food Systems
  – Regionalization of certain foods
  – “Know your farmer”
• Combined Labeling
  – Gluten-free, Non-GMO, Pesticide Residue Free, Fair Trade, etc.
Food Safety Trends

• Food Safety Modernization Act (FSMA) risk-based preventative approach
  – Sweeping Food Safety Reform
    • Prevent Food Safety Problems
    • Improve Capacity to Detect & Respond
    • Improve the Safety of Imported Foods
  – All Global Food Safety Initiative (GFSI) schemes cover this

• Combining Risk Assessment Programs – Lean Management
  – Enterprise Risk
  – Government Compliance
  – Quality

• Culture of Quality & Safety
  – Reputation & Finances
  – Meeting Buyer & Customer Expectations
  – Reliability & Efficacy
  – Collaboration across all levels in the company
Harmonizing International Food Safety Standards under the GFSI Umbrella
Global Food Safety Initiative

• Audits VS. Inspection

• Conducted by a Certification Body that is independent of supplier and customers
  – No conflict of interest

• Competent Auditors
  – Agriculture Education & Industry Experience REQUIRED

• Continuous Calibration & Improvement
Compliance Requirements

GAP/GMP vs. GFSI
Requirements of ALL Schemes

• Standards share common requirements
  – Main difference: administration process

• Management systems and commitment – engage in certification as a company culture of responsibility, rather than independent audits of facilities

• Continuous improvement in food safety management systems to ensure confidence in the delivery of safe food to consumers

• Risk assessment based program
### GAP vs GFSI schemes – Part 1

<table>
<thead>
<tr>
<th>GAP – also in GFSI programs</th>
<th>GFSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documents: Policies, procedures, risk</td>
<td>Worker Safety (inc. first aid, tractor/forklift driving)</td>
</tr>
<tr>
<td>assessments</td>
<td></td>
</tr>
<tr>
<td>Food Safety/ Harvest</td>
<td>Environmental Conservation</td>
</tr>
<tr>
<td>Worker Health</td>
<td>Water Management</td>
</tr>
<tr>
<td>New site/Land selection</td>
<td>Chemical Usage/IPM</td>
</tr>
<tr>
<td>Traceability – recall/withdrawal</td>
<td>Waste and Pollution Management, Recycling Management Recycling and Re-</td>
</tr>
<tr>
<td>Complaints Handling (GMP)</td>
<td>Use</td>
</tr>
<tr>
<td>Self-inspection</td>
<td></td>
</tr>
<tr>
<td>Employee training (Food safety, health</td>
<td>Inventory, crop scouting notes</td>
</tr>
<tr>
<td>chemical handling)</td>
<td></td>
</tr>
<tr>
<td>Pesticide/fertilizer logs</td>
<td>MRL residue analysis</td>
</tr>
<tr>
<td></td>
<td>Plant Protection Products (advisor, records, storage, disposal)</td>
</tr>
</tbody>
</table>
# GAP vs GFSI schemes – Part 2

### GAP – also in GFSI programs
- Water test
- Subcontractor licenses (if used)
- Calibration
- Pest control, post-harvest washing/treatment (if app.- GMP)
- Fertilizer Use (nutrient requirements, records of application (organic and inorganic)
- Irrigation/Fertigation

### GFSI
- Planting records
- Propagation Material – plant Quality and Health (seeds, GMOs)
- Soil Management - quality/conservation
- Soil Management – fumigation
## GAP vs GFSI schemes – Part 3

<table>
<thead>
<tr>
<th>GAP – also in GFSI programs</th>
<th>GFSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Pre-harvest – inspection of fields</td>
<td></td>
</tr>
<tr>
<td>- Harvest – personal hygiene, potable water, sanitary equipment, etc.</td>
<td></td>
</tr>
<tr>
<td>- Produce Handling – packing shed</td>
<td></td>
</tr>
<tr>
<td>(under GMP)</td>
<td>- Temperature range &amp; humidity controls in packing areas</td>
</tr>
<tr>
<td></td>
<td>- Post-Harvest Treatments, quality control, post harvest washing, pest control, packing and storage, sanitary, hygiene)</td>
</tr>
</tbody>
</table>

Notes -
- records reviewed for 3 months prior or date of registration
Compliance Requirements
Example: GLOBALG.A.P.

- First aid requirements
- Pesticide storage rules
- Vetting subcontractors
  - Includes custom applicators or aerial applicators
  - Farm Labor Contractors/ Harvest Crews
  - Pest Control Advisors

- Subcontractors required to guarantee compliance with GLOBALG.A.P.
Risk Assessments

Foundation of all audits
Sequence of Control Points/Standard Criteria

- Risk Assessment
- Plan Policy Procedures
- Training
- Implementation
Critical Risk Assessments

- Site/Land Use
- Worker Health and Safety (on farm/harvest)
- Hygiene (on farm/harvest/pack house)
- Food Defense
- GLOBALG.A.P. Version 5: Food Fraud

<table>
<thead>
<tr>
<th>Severity</th>
<th>Frequency of analyses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Significant</td>
<td>Bi Annual</td>
</tr>
<tr>
<td>Low</td>
<td>Annually; 1</td>
</tr>
<tr>
<td>Moderate</td>
<td>Quarterly</td>
</tr>
<tr>
<td>High</td>
<td>Monthly to get baseline ...</td>
</tr>
<tr>
<td>Critical</td>
<td>Monthly</td>
</tr>
</tbody>
</table>
Assessing Risk Assessments

• Ensure the 5 steps are included

• Ensure applicable risks have been identified from potential sources and types of risk

• Ensure all compliance requirements have been met

• Ensure annex requirements have been taken into account

• Auditors may determine if there were risks observed which appear relevant to the risk assessment but have not been addressed by the producer
Meeting Audit Expectations
Tips for Success
Keys to Successfully Completing an Audit – Part 1

• Accurately scoping an operation beforehand is essential to conducting a successful audit
  – Total acreage, commodity types, harvest schedule, facility layout must all be described accurately in advance

• Have your documentation completed and organized before the auditor arrives
  – The more prepared you are, the more efficient the audit will be, saving everyone’s time

• Complete the self-assessment honestly and sign-off corrective actions
  – No operation is perfect, pointing out areas for improvement is a great way to build trust with your auditor
Keys to Successfully Completing an Audit – Part 2

• Harvest is the best time to conduct an audit in order to measure all control points
  – Auditors and producers need to work together to find best date for audit to take place
  – Be flexible: mother nature and emergencies can postpone audits for both sides
  – Auditing during harvest might not be required after your first year – depending on the audit scheme or buyer requirements

• Be calm and professional throughout the process
  – Audits can be stressful, it’s important to work together with your auditor to ensure you understand what is compliant and what needs to be improved
  – Read the standard carefully before the audit, understand its principles and requirements, no surprises!
  – If there is a disagreement with the auditor, report it to upper management
Keys to Successfully Completing an Audit – Part 3

• IPM practices are required
  – Use this to your advantage:
    • Less pesticides = less chemical costs
    • Meet consumer demand for less pesticide use
    • Meet export requirements for MRLs
    • You may already be using IPM, talk about your practices with the auditor

• Use correct testing methods
  – Test for the chemicals you use
  – Water risk assessments and water tests should match!

• Look for email blasts from the certification body (CB) for scheme updates
  – CB’s send email notification of changes to requirements or compliance criteria
Looking Forward
Recommendations for 2016 and beyond
Future Requirements

• “Sustainability”
  – IPM practices
  – Soil management
  – Ethical treatment of workers
  – Managing & reducing waste: WATER, electricity, fuel, fertilizers, plastics …

• Conformance to global requirements
  – MRL testing & effective pesticide management programs
  – Traceability & supply chain verification
  – Raw ingredient guarantees
    • fertilizers, compost, chemicals (pesticides, cleaners, sanitizers)

• Global auditor calibration
Get Involved

• Working Groups
  – National Technical Working Groups
  – GLOBALG.A.P.
  – Harmonized Produce Safety Standard

• Sustainability Committees per GFSI Standards

• ATTEND/WATCH FSMA Requirements Webinars

• Attend Conferences – network with those who write the standards!
  – Sustainable Food Summit
  – PMA
  – ISEAL
  – Fruit Logistica
Contact your SCS representative …

**Food & Agriculture, Sales and Marketing Manager**
Bernadette Goldstein 510.452.6825
bgoldstein@scsglobalservices.com

**Scheme Manager, Food Safety**
Rebecca Anderson  510.452.9094
randerson@SCSglobalServices.com

**Training, Service Manager**
Diane Dulmage  510.452.8003
ddulmage@SCSglobalServices.com

**Organic/Sustainability, Account Executive**
Ned Halaby  510.452.6822
nhalaby@SCSglobalServices.com