10 YEARS OF
PROTECTING
PUBLIC HEALTH

2016/2017 ANNUAL REPORT
It has been my privilege to chair the California Leafy Greens Marketing Agreement board for the last two years. Working with our industry on this important food safety program has been gratifying and exciting, and we have made significant progress. Handler audit performance, as you will see in the statistics that follow, continues at very high levels. The LGMA Metrics will soon be updated to include FSMA Produce Safety Rule requirements. The LGMA Tech Training Program is now in its first full year of roll-out.

In April of this year, I was pleased to hand over the gavel to my colleague Steve Church of Church Brothers. Like me, Steve was an original member of the LGMA Advisory Board. We both lived through those turbulent days ten years ago when, in the aftermath of a tragic E. Coli outbreak tied to California-grown spinach, the LGMA was created.

The decade that followed has seen all those involved with leafy greens production and handling undertake a lot of hard work and achieve many successes. Our goal – to ensure that only the safest of leafy greens are shipped to consumers – remains the same. As an industry, we have improved ourselves measurably. Perhaps our greatest accomplishment is helping to change the overall culture in our farm operations to one where food safety is always the number one priority.

During the coming year, we will focus some attention on commemorating this decade of food safety commitment and LGMA’s oversight in the leafy greens industry. But please take a moment to look back at a few numerical benchmarks. In ten years, the LGMA has:

- Conducted more than 5,000 government audits on leafy greens farms
- Verified compliance with 841,597 checkpoints on those audits
- Educated over 1,000 workers through the LGMA Tech training program

In that time, over 500 billion servings of leafy greens grown under the auspices of this program have been shipped.

As we look to our second decade, we will rededicate ourselves to our goals and do everything we can to be the standard for safe leafy greens!

Sincerely,

Ron Ratto
LGMA Chairman, April 2015 – March 2017
05.2016 | EXPERT PANEL FINDS METRICS SCIENTIFICALLY SOUND
A scientific review panel examined the LGMA Metrics and issued a report summarizing its findings. The panel came to the consensus that the LGMA Metrics represent the most current microbial food safety practices for the production and harvest of leafy greens. The panel also concluded that the LGMA Metrics provide the same level of public health protection as requirements in the FDA’s Produce Safety Rule.

06.2016 | OUR FRIENDS IN ADVOCACY: STOP FOODBORNE ILLNESS
STOP Foodborne Illness was presented with the LGMA’s Golden Checkmark Award in recognition of its tireless advocacy on behalf of victims of foodborne illness and its support of mandatory government oversight of food safety systems. Accepting the award were Deirdre Schlunegger, STOP CEO, and Rylee Gustafson, a young woman whose life was forever changed by the 2006 E. coli outbreak associated with spinach.

09.2016 | FOOD SAFETY DOESN’T END ON THE FARM
The LGMA unveiled a new website designed to show what California farmers are doing every day to make sure leafy greens are grown safely: www.safeleafygreens.org. The new site provides simple information on how consumers can safely buy, store, and prepare leafy greens. It also provides information on the nutritional content of your favorite leafy greens varieties.

10.2016 | COLLABORATING WITH REGULATORS
FDA’s new Deputy Commissioner for Food, Dr. Stephen Ostroff, came on a farm tour to look at the food safety program implemented by the leafy greens industry ten years ago to protect public health and ensure safe leafy greens. The LGMA has continued to work closely with Dr. Ostroff on the implementation of the Food Safety Modernization Act.

12.2016 | RECORD RAINFALL IN CALIFORNIA
California experienced its second wettest rain season to date in 2016/2017. While the rainfall was welcome, it did generate questions about the potential for flooding on the farm. The LGMA food safety practices provide guidance on what to do if flooding affects a leafy green crop; the LGMA’s staff worked with its members and their growers to ensure that they know what to do to keep food safe after a flood.

01.2017 | A NEW STRATEGIC PLAN
The LGMA adopted its fourth Strategic Plan in 2017. Since it began, one of the LGMA’s core principles is the drive for continuous improvement. This is important not just when it comes to improving on food safety practices on leafy greens farms, but also in how the organization’s programs are implemented and managed.
LGMA certification requires a constant commitment to food safety. In fact, many LGMA members say that the LGMA requirements prepare them to succeed at other required food safety audits.

LGMA members are shippers of leafy green products in California; they can also be growers, but they must be shippers. They voluntarily join the LGMA, but once they sign on they are responsible for ensuring that the LGMA Metrics (or Food Safety Practices) are used in all of their growing and harvesting operations.

The LGMA verifies that members are using the Metrics through frequent government audits. On average, each LGMA member is audited five times a year. Members have scheduled audits once every two months to verify that they are growing and harvesting leafy greens according to the Metrics. Each member also has one unannounced audit each year.

During the last fiscal year, which began on April 1, 2016, the California LGMA conducted 440 member audits. Here’s how that compares with previous years:
In the last fiscal year, LGMA auditors verified 70,825 checkpoints through a total of 440 audits. Each scheduled audit consists of 187 checkpoints, and each unannounced audit has 42 checkpoints. The LGMA uses auditors from the California Department of Food and Agriculture to conduct its audits. These auditors are paid by the LGMA, not the company undergoing the audit.

LGMA Audits are not scored, and each non-conformity cited by the LGMA must be corrected. These corrective actions are verified by government inspectors. Each audit is reviewed by the LGMA Compliance Officer and the United States Department of Agriculture. The LGMA Compliance Officer assigns each non-conformity identified in the audit one of following four citation levels:

**Minor Infrctions**

These violations do not necessarily increase the risk of unsafe product.

Corrective action can be taken before the auditor leaves the premises.

Multiple citations at this level will be elevated to the next level.

126 citations in 2016/17

**Minor Deviations**

These violations do not necessarily result in unsafe product.

Corrective action must be provided within 5 days and is verified during the next scheduled audit.

Multiple citations of the same type within a year maybe raised to a Major Deviation.

255 citations in 2016/17

**Major Deviations**

These violations do not necessarily result in unsafe product.

Corrective action must be provided in 5 days. Verified by an on-site inspection within 3 additional days.

This level citation can be elevated if it is not corrected.

5 citations in 2016/17

**Flagrant Violations**

These violations significantly increase the risk of delivering unsafe product into commerce.

Penalties can range from temporary to permanent decertification.

If this, or any citation, could result in unsafe product going to market the California Department of Public Health is notified.

No citations in 2016/17
In 2016/17, the LGMA cited its member companies for 386 non-conformities with the LGMA Metrics, up slightly from the previous year.

Overall, compliance on LGMA audits is very strong. In the past three years each audit has averaged less than one citation.

One benefit of the LGMA program is its ability to look at the California leafy greens industry as a whole. Of over 70,000 audit checkpoints, only 386 citations were issued for non-compliance. 100% of those were corrected.

99.5% Industry Compliance Rate
The chart to the right breaks down the citations issued by level. This fiscal year, 99% of citations were either Minor Infractions or Minor Deviations – the two least serious categories. Only five citations were Major Deviations: these are serious food safety issues, but do not necessarily make food unsafe.

Details on Major Deviations
The 2016/17 season saw a significant reduction in the number of Major Deviations cited for LGMA members – only five, compared to 13 the prior year. This represents a 62% reduction from the prior year. Here are details on the five Major Deviations cited during the year:

#1 Animal tracks were discovered in the field, and a loose dog from adjacent private residence was in a field under active harvest. These were not noted during the daily harvest assessment. The area where tracks were found had not been harvested and was flagged as a no-harvest area. The harvest crew foreman was re-trained on the need to fully investigate any evidence of animal activity in and around a field under active harvest.

#2 No pH test strips were available during the audit. The crew foreman and food safety representative were re-trained, with an emphasis on the importance of strict adherence to the food safety program and communicating when supplies necessary to test pH and chlorine concentrations have run out. Subsequent follow-up by the auditors demonstrated that personnel were in full compliance with the Metrics.

#3 A company was unable to provide personnel to accompany the auditor, despite the requirement that somebody be available 24/7. The food safety supervisors for the handler and grower came together and established a system to improve communications. This was verified during a follow-up visit from the auditor.

#4 On another occasion, one company did not have pH test strips available during the audit. When test strips were provided, the recorded free chlorine and pH levels fell outside the limits prescribed in the company’s SOP. The crew foreman was retrained, and this was verified by an auditor during a follow-up visit.

#5 At the time of audit, the auditor was unable to verify the company’s traceback program. The handler instituted a new program to improve communication and ensure that any product sold to another entity and beyond their control is tagged to reflect the sale. This was verified by the auditor at the follow-up inspection.
The LGMA Metrics and audit look at seven different categories of risks in the farming and harvest of leafy greens. As we have seen in years past, “Field Observations” is the audit area with the most citations, while “Soil Amendments” and “Field Sanitation” are the audit areas where we see the fewest citations.

Following is some detail on each area and the 2016/17 results:

**General Requirements**
These metrics are related to an individual company’s food safety management program. They include having a written compliance plan, a current list of growers, a traceability program, and at least two designated individuals who are available 24 hours a day to oversee their food safety program. There were 29 General Requirement citations in this fiscal year, accounting for 8% of all citations.
Environmental Assessments
These metrics are a vital part of farm food safety and apply to every ranch on which LGMA members grow leafy greens. There are three required Environmental Assessments: a pre-planting assessment, a pre-harvest assessment (within 7 days of beginning harvest), and a daily harvest assessment. The goal of these assessments is to thoroughly assess each field for any signs of animal intrusion or other environmental concern. This year there were 43 citations in this category, accounting for 9% of all audit citations.

Water Use
These metrics apply to all water used for growing and harvesting leafy green crops. They include specific sampling and testing requirements for pre-harvest and post-harvest water. The goal is to ensure that contaminants are not introduced to the crop from any water source. This year there were 56 citations in this category, accounting for 14% of all audit citations.

Soil Amendments
These metrics outline how soils amendments used in the production of leafy greens must be composted, treated, and tested to ensure that they are pathogen free and will not contaminate the crop. Raw or partially-composted animal manure cannot be used. There were 18 citations in this category - 5% of all audit citations.

Worker Practices
Metrics in this area relate to worker practices in the field and a company’s Standard Operating Procedures. These include having a sanitary facility program, a worker health practices program, and visitor policies. The goal of these metrics is to ensure that people who work on the farm and in harvest operations do not introduce pathogens to the product. This category accounted for 55 citations - 14% of all audit citations.
Field Sanitation
Metrics in this area address the cleaning and sanitization of farm equipment. They include having a written SOPs for sanitation and conducting a daily harvest assessment for food safety. The goal is to ensure that farm and harvest equipment do not introduce pathogens to the leafy greens crops. This category accounted for 21 citations, accounting for 5% of all citations issued.

Field Observations
Metrics in this category are verified through a field inspection. During this portion of the inspection, the auditor visually verifies proper water and soil amendment use, employee hygiene, and hand-washing, to name a few. Interviews with harvest crew members and foremen are another important part of this portion of the audit. These help ensure that they know and follow the company’s SOPs and food safety policies. This year there were 174 citations in this category, accounting for 45% of all citations issued.
Coming Soon
## Advisory Board Members & Alternates

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<th>Joe Pezzini - Ocean Mist Farms</th>
<th>Mike Costa - Mann Packing</th>
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<td>Jamie Strachan - Growers Express LLC</td>
<td>Juanita Ceja - Dole Fresh Vegetables</td>
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<td>Steve Church - Church Brothers Farms</td>
<td>Manny Alcala - Duda Farm Fresh Foods</td>
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<td>John D’Arrigo - D’Arrigo Brothers of CA</td>
<td>Tom Russell - Pacific International Marketing</td>
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<td>Ron Ratto - Ratto Bros., Inc.</td>
<td>Jennifer Clarke - Steinbeck Produce</td>
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<td>Gurmail Mudahar - Tanimura &amp; Antle</td>
<td>Eric Wexler - Tanimura &amp; Antle</td>
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<td>Jan Berk - San Miguel Produce</td>
<td>Nob Furukawa - Gold Coast Packing</td>
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<td>John Jackson - Beachside Produce</td>
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<td>Dan Sutton - Pismo Oceano Vegetabel Exc.</td>
<td>Mitch Ardantz - Bonipak Produce</td>
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<td>Todd Brendlin - Crystal Organic/Grimmway</td>
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<td>Steve Powell - Peter Rabbit Farms</td>
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<td>Barbara Matthews - Public Member</td>
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## Technical Committee

- Megan Chedwick - Church Brothers Farms
- Bardin Bengard, Bengard Ranch
- Jim Brennan, Alliance of Tech. Profs
- Michael Brautovich, Earthbound Farms
- Juanita Ceja, Dole Fresh Vegetables
- Jennifer Clarke, Steinbeck Produce
- John Jackson, Beachside Produce
- Sharan Lanini, Pacific International Mktg
- Bob Martin, Rio Farms
- Bob Mills, RSM Food Safety Service
- Gurmail Mudahar, Tanimura & Antle
- Geremy Olson, Deardorff Family Farms
- Cosme Pina, Taylor Farms
- Jeff Saleen, Bonipak Produce
- Ken Stearns, D’Arrigo Bros of California
- Ralph Treadway, Coastline Family Farms
- Chato Valdez, Sabor Farms

## Executive Committee

- Steve Church, Church Brothers Farms
- Jan Berk, San Miguel Produce
- Joe Pezzini, Ocean Mist Farms
- Ron Ratto, Ratto Bros., Inc.
- Dan Sutton, Pismo Oceano Vegetable Exch.
- Ryan Talley, Talley Farms

## Communications Committee

- Dan Sutton, Pismo Oceano Vegetable Exch.
- Caitlin Antle Wilson, Tanimura & Antle
- Matt Seeley, The Nunes Company
- Vivian Sotello, Coastline Family Farms
- Marissa Ritter, Grower Shipper Assn
- Kori Tuggle, Church Brothers Farms

## Staff

- Scott Horsfall, CEO
- April Ward, Communications Director
- Jonathan Field, Compliance Officer
- Mike Villaneva, Technical Director
- Amarachi Okemiri, Member Services Coordinator