



June 4, 2007

**Comments on "Commodity Specific Food Safety Guidelines for the Production and Harvest of Lettuce and Leafy Greens," May 24, 2007.**

Submitted to:

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Thank you for the opportunity to comment on the May 24 version of the Food Safety Guidelines. CAFF appreciates the hard work and sustained effort that has gone into the Marketing Agreement. We appreciate the efforts of Western Growers Association to respond to the concerns CAFF raised earlier about implied food safety risks associated with conservation plantings. Our current comments are divided into general and specific concerns.

**General Concerns**

The authors, contributors and reviewers of the May 24<sup>th</sup> Guidelines have made an admirable effort to present comprehensive, clear and specific guidance for the industry. The Guidelines do an excellent job of codifying and quantifying the appropriate protocols and practices. As noted in the Introduction, many of the practices that are included have already been adopted by the vast majority of the industry.

What is groundbreaking, as pointed out in the Introduction, is the new focus on field production and harvest operations. This emphasis has developed because the best practices employed in processing plants have, in a few instances, failed even though it is well known in the industry that most of the processing plants in the Salinas Valley have highly developed food safety plans. In fact, many spokespersons have stated that processing plant protocols are already at a higher standard than those in the Guidelines.

Reducing any contamination coming into the plants, it is hoped, will reduce the possibility of any product leaving the plant containing human pathogens. Although there are many possible explanations for the processing plant failures, the explanation being suggested by the industry is that product coming into the plant was so contaminated that the best food safety practices in place were unable to reduce contamination to a safe level.

While no one is sure why the processing plants occasionally fail to reduce contamination to a safe level, our scientific knowledge of how to control and minimize contamination in the field is even more limited. Overall, the Guidelines are sensible and appropriate, calling for water testing, worker health and hygiene and sanitation of harvest equipment. However, they also call into question many practices that are commonplace in biologically-based farming systems, and that have never been implicated in any leafy-greens food-borne illness outbreaks. For example, the use of fully composted animal manures; the use of fish emulsions and fish meals; and postharvest grazing by domesticated animals.

In contrast to the concerns raised about these biologically-based practices, the Guidelines contain no discussion of scientifically validated and environmentally sensitive practices like filter strips to limit the movement of manure from cattle pastures, or the development of healthy microbiological communities in soil to limit the life of human pathogens.

*We propose three areas for additional study and collaboration:*

1. Additional study is needed into biologically-based and environmentally sensitive practices that will prevent the presence of food-borne pathogens on leafy greens leaving the farm. Those that are already scientifically validated should be incorporated into the Guidelines, and additional biologically-based practices should be encouraged as soon as appropriate.
2. One of the most significant areas of concern for many farmers will be water quality. It is critical that the leafy greens industry work collaboratively with the cattle industry and the SWRCB to clean up water systems and prevent water contamination by *E. coli* 0157. Testing for 0157 (not generic *E. coli*) and statewide databases to record the results, especially in surface water, should become standard.
3. The implementation of the Guidelines and the Marketing Agreement will rest on the shoulders of the auditors and inspectors. If the auditors are unfamiliar with farming, oblivious of the importance of conservation efforts, or unsure as to how to apply the standard, there will be many unfortunate consequences. Work is needed to educate the auditors on many levels.

## **Specific Concerns**

1. *Correct the definition of leafy greens used in the Guidelines.*

The definition of leafy greens should be limited to products that are grown to be delivered to processing plants. Since bagged products are the most common vehicle for produce-linked outbreaks of 0157, our effort should prioritize resources on them. The FDA and the fresh cut industry have acknowledged the special risks inherent in these products for years.

Processed, bagged products require an entirely different set of regulations and inspections because of their increased risks. Centralization of washing and

packaging is a major risk factor, particularly from mixed farm loads. The product is enclosed in a packaged environment that can reach high humidity and provide favorable conditions for microbial growth.

Because bagged leafy greens are highly perishable, they must be distributed, stored and displayed under refrigeration. Even a temperature gap of a few hours can cause a problem. But these products travel extensive distances, with many possible ways that there could be gaps in temperature control – for example, at the supermarket chain’s regional distribution center; in transit to stores; once the product arrives at the stores; and of course, after it is purchased by the final customer.

Industry standard for most fresh cut salads is a shelf life of 15 to 17 days once the product leaves the processing plant, up from 5 to 10 days just a few years ago. This is too long because even an inconsequential presence of the pathogen can multiply in this time frame into a serious dose. The Guidelines should consider reducing the allowable shelf life of bagged leafy greens.

The Guidelines should also require that bagged leafy greens be labeled with the statement that the consumer should keep the product refrigerated and wash it before eating. The current “Ready to Eat” statement is misleading.

It is unclear how the “leafy greens” definition was developed. For example, why are kale, arugula and chard singled out from a myriad of greens grown in California, even though these greens are usually cooked by the consumer?

Please be clear that CAFF recommends that all growers of leafy greens, including fresh market growers, need to step up their food safety programs given the increased risks we all face related to 0157. However, we recommend that the current effort be used to focus grower resources on the highest-risk products and develop a program specific to those products.

*2. Assist growers in prioritizing food safety programs to the areas of greatest concern.*

The *E. coli* 0157 problem poses a very serious threat and it is the responsibility of all growers, including fresh market growers, to address it. However, with limited time and resources available on the farm, the most successful program will prioritize resources to focus on the greatest risks. A tremendous amount of data and experience is available linking *E. coli* 0157 outbreaks with proximity to dairy and beef cattle operations. With this in mind, the definition of animals of significant risk should be reworked, especially with respect to deer. Compared to cattle, deer are a much less significant risk. Most research shows that *E. coli* 0157 is present at a very low level in deer populations.

*3. Conduct an evaluation of the impact of the Guidelines upon growers and consumers and consider the fact that one set of metrics may not be appropriate for all growers.*

Several types of record keeping and paper work will flow down to the grower upon implementation of the Guidelines. Each grower will be required to retain the following:

- A written leafy green food safety compliance plan
- A water system description using maps, photographs, drawings or other means
- Monthly water test results
- Records of environmental assessments prior to planting, prior to harvest and during harvest. Documentation regarding intrusions of animals of significant risk and corrective actions.
- Certificate of Analysis of every compost lot
- Certificate of Analysis and documentation of process of production for nonsynthetic crop treatments like blood meal, fish meal and fish emulsion.
- Written worker practices program to verify employee compliance with food safety policy
- Written worker health practices program
- Appropriate records related to equipment cleaning and possible cross-contamination issues.
- Daily harvesting food safety reports
- Documentation of maintenance and sanitation schedules and any remedial practices
- Logs documenting cleaning and sanitation for containers and equipment that will be used in product hydration

Perhaps these requirements are reasonable on a farm characterized by large fields, irrigated from one pump, with only one crop grown per field and where the crop is harvested and delivered to market all at once. Perhaps this describes the style of farm that is most familiar to the members of the Leafy Green Handlers Marketing Agreement Board. However, many leafy greens are grown for the fresh market; on farms producing many seasonal crops together; with multiple water sources; practicing continuous harvesting over the period of a season; and with many multiple, small, sequential plantings. The Marketing Agreement Board should consider the impossibility of fully implementing these guidelines on such a farm, especially if the farm is employing biologically-based production practices.

If many fresh market growers find that they are unable to fully implement these Guidelines, it seems plausible that a consolidation and shift in the industry will take place towards the larger growers producing for the processing market. Consequently, many consumers will lose access to fresh-grown leafy greens, a result that we assume none of us, especially thousands of urban consumers, would favor.

Thank you very much for your consideration of our comments. We remain very willing to participate in your deliberations and consideration of these tricky and difficult subjects.