# LGMA Metrics Update

## Gustavo Reyes, from Western Growers, managed the process for updating the CA LGMA metrics in partnership with members of the Arizona and California LGMAs and Subject Matter Experts Channah Rock (University of Arizona), Michelle Danyluk (University of Florida), and Trevor Suslow (Emeritus UC Davis).

## In February of 2024 two priorities were set by the priority setting committee:

## Review Harvesting Equipment Cleaning and Sanitation

##  Review Water Requirements

During the months of April and May the two priority working groups met multiple times

* Harvest Equipment Sanitation - 9 meetings
* Water - 6 meetings

## Harvesting Equipment Cleaning and Sanitation

The following amendments were submitted:

**Training**

* New training requirements for sanitation crew members
* Frequency of the training should be included in the requirements- for example upon hire, seasonal, and tailgates (monthly or quarterly).
* Should mention the requirements for individuals who are conducting the sanitation training- for example, they should be a qualified individual
* At least one individual from the company must attend an LGMA training on Cleaning and Sanitizing of Harvest Equipment
* Include the following training topics: Use and storage of sanitation tools, Location of the equipment for cleaning to prevention of cross contamination
* New training requirements for personnel conducting sanitation program self-assessments

**Harvest Equipment Sanitation**

1. New Table 5 – Pre-cleaning preparation information
	* personnel, personal protection equipment (PPE), sanitation tools, chemicals, and Instruments.
2. New Table 6 – Cleaning and sanitizing of harvest equipment
	* sanitation best practice language
	* 7-steps of cleaning and sanitation
	* Sanitation Preparation- Add verbiage around covering extra packaging material if it cannot be moved and covering electrical components before beginning activities.
	* Step 3- This step states “do not allow detergents solutions to dry” but there should be some verbiage around required contact times must be met before solution is rinsed.
	* verification procedures-
	* Quantitative measurements on food contact surfaces should be taken regularly, such as ATP (daily or weekly) on value-added machines
	* Sanitation procedures should be developed and assessed using quantitative measurements (ex. APC) before and after cleaning. Food contact and adjacent surfaces should be included.
	* Per Harvest Forward the parameters for APC <2,000 CFU, ATP <10,000 RLU
	* Pathogen testing (ex. Listeria) should be done on zones 2-3 seasonally (ex. during transition)
	* Measurements could be taken on rotating equipment- for example, not all equipment needs to be tested every time
	* day of harvest/post-cleaning procedures
	* Harvest equipment should be sanitized prior to starting harvesting activities, the metrics only mentions hand-harvest equipment should be rinsed and sanitized at the beginning of the day.
	* Food contact and adjacent surfaces should be rinsed/sanitized after each break/lunch. This is outlined in our SSOPs for Value-Added and Fresh Pack



1. Self-assessment against new sanitation requirements
	* documented seasonally
	* Random spot checks/audits of sanitation crew audits should be completed as part of the seasonal sanitation program assessment
	* Evaluation of chemicals used for sanitation should be done by qualified individual or through a 3rd-party sanitation or chemical company
2. Hygienic design review
	* documented annually
	* Assessments should be completed seasonally for each value-added harvest machine and at least annually for external machines.
	* Fresh pack machines should be done annually.
	* Assessments should be completed when there are modifications made to the harvesting equipment or a piece of equipment is brought back into production after not being used for an extended period of time.
	* Assessments must be completed for new harvesting equipment before it is used for production.
	* review includes evaluation of food contact and machine infrastructure of the harvesting equipment.
	* Machines may need to be partially disassembled to conduct a comprehensive hygienic design assessment.
	* Under Section 8.1 Harvesting Equipment Hygienic Design Evaluation Criteria, it is missing features such hollow areas (ex. rollers) and hinges (ex. piano hinges, alligator clips, etc.), braided covers, conveyor belt materials, bolts/nuts/fasteners on food contact surfaces.
	* PECs are not mentioned in the proposed metrics but should be used when corrective measures or modifications cannot be taken. Harvest Forward outlined the requirements on how to handle PECs when equipment cannot be modified.
	* Assessment should include evaluating the ability to dismantle and reassemble equipment for cleaning.
	* Corrective actions should also address specific issues identified during the assessment such as bad welds, torn belts, etc.
	* Documentation showing before and after should be included in the corrective actions.
3. General Improvements
	* language updates to align with AZ LGMA are included as part of the metrics review.
	* modification to Metrics for improved organization and clarity.
		1. new glossary terms
		2. splitting Issue 8 into three subsections (8.1, 8.2, and 8.3)
		3. language updates recommended by the working group

## Water

**Current Review Period**

The language in the water section was slightly modified to align with language in the FSMA Final rule for pre-harvest agricultural water. The updates include:

* language related to crop characteristics such as susceptibility to pathogen adhesion and internalization
* updates to our current agricultural water assessment requirements
* additional information for protection from possible sources of contamination

**Next Review Period**

In addition to the language noted above a second comment period will be conducted later this year for the following areas:

* assessing, sampling, and testing of wells
* reviewing new classifications for water beyond Type A and B

## Western Growers Comments Period (June 3 – July 2)

The comment period for the proposed changes starts on Monday, June 3rd and closes on Tuesday, July 2nd.

The proposed changes can be viewed by visiting the Leafy Green Guidance website: <https://www.leafygreenguidance.com/>

## Western Growers Webinar (July 9)

On July 9, Western Growers will host a web discussion surrounding all submissions received during the comment period. During the web discussion, proposed changes to the LGMA-approved metrics will be publicly presented by the corresponding submitter with open dialogue allowed for all attendees.