

# Feds may revise new food safety rules for irrigation water

December 5 2014, by Rod Santa Ana

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Dr. Juan Anciso, right, horticulture specialist at the Texas A&M AgriLife Research and Extension Center at Weslaco, checks emerging onion plants in an irrigation study alongside Hal Hoffman, an onion buyer in Alamo. Credit: Hal Hoffman

Complaints from farmers nationwide have encouraged the Food and Drug Administration to take the almost unheard of act of revising landmark food safety laws that were scheduled to take effect soon, according to a Texas A&M AgriLife Extension Service food safety expert.

Dr. Juan Anciso, a horticulture specialist at the Texas A&M AgriLife Research and Extension Center at Weslaco, said the new rules on food

safety are part of the proposed Food Safety Modernization Act designed to reduce food-borne illnesses.

The act was signed into law by President Obama in 2011, but growers now have a second opportunity to provide input that might change the language on specifics before it is enacted.

"The new federal regulations would set standards for the growing, harvesting, packing and holding of produce for human consumption," Anciso said. "Of great concern to producers in the Lower Rio Grande Valley were those rules that dealt with irrigation water, because they irrigate from the river and there are microbes in it."

According to the proposed rules on irrigation water, the FDA wanted to set an upper limit of 235 colony-forming E. coli cells per 100 milliliters of water, he said. Irrigation water sampled to have more than that would render the produce inedible and trigger a mandatory remedy for the water source.

While such rules might be workable for well water, they could not be fairly applied to surface water from the Rio Grande and canals that deliver it to fields, Anciso said.

"The levels of microbes go up and down constantly," Anciso said. "A lot would depend on when and where the samples were taken."

Anciso and others argued at FDA hearings that the rules would unfairly punish South Texas growers, especially those whose fields are designed such that water does not always make actual contact with the produce.

"And that number, 235 units, was almost just pulled out of thin air," he said. "Actually, FDA was using the World Health Organization's standard to establish that water is safe for swimmers, which has no

scientific connection to irrigation and [food safety](#)."

But instead of arguing whether 235 units made for good or bad [irrigation water](#), Anciso and others from Texas and California presented scientific research showing that E. coli counts varied widely in water, but most importantly that after five days in a field, those E. coli counts dropped dramatically.

"We argued that five days after irrigating, E. coli on produce dropped by an average of 25 times," he said. "Regardless of what the cell count was in the water, a reduction that great dropped it well below their 235 cells, every time."

The tests were done on spinach, which Anciso said naturally carries a higher bacterial load than other vegetables, likely because of its coarse texture.

"If waiting five days after irrigating to harvest works on spinach, it will work on other vegetable crops, including cantaloupe, tomatoes, peppers, lettuce and others," he said. "And it should work for growers throughout Texas, based on our climate, soils and grower practices."

While it's not known what the final rules and regulations will look like, Anciso said growers have the rare opportunity of a second comment period.

"Growers who irrigate with river and other surface waters have a golden opportunity to voice their opinions about this revised irrigation rule that, if approved, will make production much less restrictive," Anciso said. "They have only a few days to comment, so, because this is all about their livelihood, I strongly encourage them to do so as soon as possible."

He said when final rules become law, they will be adopted over time

with smaller farms having more time to comply.

"This latest comment period ends Dec. 15," he said. "The law should become effective in late 2015."

**More information:** The FDA has fact sheets for the 550-page proposed regulations at [www.fda.gov/Food/GuidanceRegulation/FSMA/ucm247546.htm](http://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm247546.htm)

Provided by Texas A&M University

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